FRV DELAWARE II CRUISE

30 JUNE TO 7 JULY 1978

DATA REPORT

K. von Bock and W. Behrens, Editors

May 1982

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INTRODUCTION

This was the last of three companion cruises [cf. ARGUS Data Report 1980 BNL 28596] designed to provide broad-scale coverage of seasonal shelf conditions occurring between the April and October investigations undertaken aboard ATLANTIS II cruises 99 and 104. Its purpose was to measure trans-shelf and alongshore exchange/coherence of dominant biological and physiochemical variables as they relate to the cycling of Spring carbon fixation in the New York Bight and its upstream influence, Georges Bank. It also had the particular intention of exploring the probable relevance of the "cold pool" (Ketchum and Corwin, 1964) as a seasonal residence for specific zooplankton communities.

Classical hydrographic stations were chosen to generate profiles across Georges Bank, the "Shinnecock Transect" and along the intervening 60 m isobath. Measurements of historic water mass variables (ACE I-ACE III) were augmented by plankton collections and daily estimates of primary productivity. Thermal soundings were made to fill in temperature structure and suspended solids were counted to elucidate other biomass measurements.

METHODS

Hydrography

Temperature, Salinity

Temperatures are average values derived from paired Gohla reversing thermometers mounted to 5 & Niskin bottles and corrected according to standard methods. Salinity was measured ashore in a conductance salinometer (Guildline Autosol 8400), which was referenced to standard seawater (IAPSO Copenhagen or Wormley). Supplementary thermal structure was obtained from

interstation, underway soundings of Sippican Model T-10 XBTs. The manufacturer's specifications for accuracy are:

(1) System

Temperature: $\pm 0.2^{\circ}\text{C}$

Depth: ± 2 or 4.6 m, whichever is greater

(2) Probe

Thermal response: 63% of a step change in temperature in 1 m; 95% of a stepchange in temperature in 3 m.

The traces were converted to digital values using a Hewlett-Packard 9872 plotter, the values interpolated to 1 m averages, and the traces subsequently regenerated using a Hewlett-Packard 9845 computer. Their numbering scheme uses the station identification immediately preceding the sounding plus the letter "A".

Chlorophyll a

Discrete chlorophyll a/phaeophytin concentrations were measured fluorometrically using a Turner Designs Model 10 fluorometer. Glass-fiber filters retaining plankton from 140 ml samples were ground in 90% acetone and the fluorescent emission of a clarified extract measured before and after acidification with ~1-2 drops of 1.0 N HCl (Lorenzen, 1966).

The fluorometers had been calibrated using serial dilutions of a pure chlorophyll a standard derived from laboratory cultures of phytoplankton. The concentration of the standard was measured spectrophotometrically using an extinction coefficient of $87.67 \text{ l}\cdot\text{cm}^{-1} \text{ g}^{-1}$ at 664 nm. The dilution (90% acetone) fluorescences were read before (R_0) and after (R_a) acidification (10% HCl) on a least two sensitivity ranges. Calibration factors for all dilutions were computed by:

$$F' = \frac{\mu\text{g chl } a \cdot \text{ml}^{-1}}{\frac{\tau}{\tau-1} (R_o - R_a)}$$

The mean F' determination was accepted as the calibration factor for all subsequent instrument determinations of chlorophyll a and concomitant phaeophytin, and any significant variation among the serial factors over the selected ranges has been compensated by internal adjustments.

Nutrients

60 ml samples were frozen (-20°C) after drawing and later analyzed ashore at BNL. Nitrate, nitrite, phosphate, and silicate were determined colorometrically. The automated methods used on a Technicon AutoAnalyzer utilized the analytical procedures of Murphy and Riley (1962) for reactive phosphorous and Armstrong and others (1967) for silicate and nitrate. Modifications were made to permit the use of small-volume glassware in the manifolds in order to optimize stability and sensitivity.

Particulate Matter

Abundance and size-frequency distribution of particulate material were determined with a Coulter Counter Model TA II. A 280- μm aperture tube was used, which quantified particles between 50.4 and 128.0 μm equivalent spherical diameter (ESD). Counting duration ranged from 60 to 300 seconds depending on particle concentration.

Productivity

Carbon assimilation rates were determined by inoculating, with 5 μCi of ^{14}C -labeled $\text{NaH}^{14}\text{CO}_3$, samples drawn from 10 $\times$ Niskin bottles representing 100, 60, 26, 15, 5, and 1%, of incident radiation. Light attenuation

curves were calculated from secchi disk lowerings; incident surface radiation was measured by a photometer coupled to an integrator and attached near the incubator. The enriched bottles, screened for neutral density at respective light levels, were incubated with companion dark bottles from ≈ 800 -1400 in natural light in flowing surface seawater. After filtration (Millipore HA), filters were fumed 60 sec over concentrated HCl and reserved in 10 ml scintillation solutions (Beckman Filter Solv.). Activity was later measured by a Beckman LS 3150T scintillation counter using external standardization. Dark count values were subtracted from sunlight values during rate calculation.

Zooplankton

Paired, 223 μ nylon nets mounted to coupled 60 cm frames (Bongo) were hauled near-vertically from 100 m to surface, or, in shoaler waters, from within a few meters of bottom. Flow volumes were derived from a General Oceanics flowmeter which bridged one of the nets. One net collection was preserved in formalin and reserved for later onshore composition analysis. The other was processed for total catch estimates by being either washed entirely, or in fractions, to tared filters which were subsequently dried (60°C) to constant weight and measured by an analytical balance.

During subsequent analysis for taxa and abundance estimates, aliquots from each collection were withdrawn with a Stempel pipette and counting/identification proceeded through successive aliquots until 50 individuals per category had been identified; however, not more than 5 aliquots were drawn for any one category. Counts were multiplied by appropriate factors to yield concentration (No. m^{-3}) and/or standing stock (No. m^{-2}) estimates.

Phytoplankton

Samples were drawn from surface and the subsurface chlorophyll maxima, outlined by casting an FTD, and preserved immediately with 1-2 ml of Lugol's solution. During subsequent analysis ashore, 10 ml aliquots were settled in Utermohl chambers and examined with an inverted microscope equipped with phase-contrast illumination. One-half, or the whole chamber, was counted depending upon cell density.

REFERENCES

- Armstrong, F.A.J., C.R. Stearns, and J.D.H. Strickland. 1967. The measurement of upwelling and subsequent biological processes by means of the Technicon AutoAnalyzer and associated equipment. Deep-Sea Res., 14: 381-389.
- Bendschneider, K. and R.J. Robinson. 1952. A new spectrophotometric determination of nitrite in seawater. J. Mar. Res., 2: 87-96.
- Holm-Hansen, O. and B. Riemann. 1978. Chlorophyll a determination: Improvements in methodology. Oikos 30: 438-447.
- Ketchum, B.H. and N. Corwin. 1964. The persistence of "winter" water on the continental shelf south of Long Island, N.Y. Limnol. Oceanogr. 9: 467-475.
- Murphy, J. and J.P. Riley. 1962. A modified single solution method for the determination of phosphate in natural waters. Anal. Chim. Acta, 27: 31-36.
- Perkins, H.J. and D.W.A. Roberts. 1962. Purification of chlorophylls, phaeophytins, and phaeophorbides for specific activity determinations. Biochim. Biophys., 58: 486-498.
- Strickland, J.D.H. and T.R. Parsons. 1972. A Practical Handbook of Seawater Analysis. Fish. Res. Bd. Canada Bull., 167: 267-278.
- Sverdrup, H.U., M.W. Johnson and R.H. Fleming. 1942. The Oceans, Their Physics, Chemistry and General Biology. Englewood Cliffs, NJ, Prentice-Hall.
- Whitledge, T., S. Malloy, C. Patton, and C. Wirick. 1981. Automated nutrient analysis in seawater. Brookhaven National Laboratory Technical Report BNL 51398.
- Yentsch, C.S. and D.W. Menzel. 1963. A method for the determination of phytoplankton, chlorophyll, and phaeophytin by fluorescence. Deep-Sea Res., 10: 221-231.

PERSONNEL

	<u>Affiliation</u>	<u>Responsibility</u>
John Walsh, Chief Scientist	Brookhaven National Laboratory	Chlorophyll <u>a</u>
William Behrens	State University of New York at Stony Brook	Primary Productivity
Dennis Carlson	Brookhaven National Laboratory	Zooplankton
David Grill	Brookhaven National Laboratory	Particles, Zooplank- ton Feeding
Roland Hautsch	Brookhaven National Laboratory	Zooplankton
Steve Howe	Brookhaven National Laboratory	Zooplankton Respira- tion
James Löfstrand	Brookhaven National Laboratory	Hydrography
Andrew Stoddard	Brookhaven National Laboratory	Chlorophyll <u>a</u>
Joseph Tokos	State University of New York at Stony Brook	FTD
Karl Von Bock	Brookhaven National Laboratory	Hydrography

HYDROGRAPHY DATA

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

TABLE OF UNITS

STATION	DATE	MESSENGER TIME LOCAL	LATITUDE DEG N	LONGITUDE DEG W	SONIC DEPTH METERS	SECCI DISK M
	WIND DIRECTION WMO CODE	WIND SPEED M/SEC	WAVE DIRECTION WMO CODE	WAVE HEIGHT WMO CODE	WAVE PERIOD WMO CODE	BAROMETRIC PRESSURE MBS (TRUNC)
	AIR TEMP DRY BULB C	WEATHER WMO CODE	CLOUD TYPE WMO CODE	CLOUD AMOUNT WMO CODE	VISIBILITY WMO CODE	
ESTIMATED DEPTH M	ACCEPTED DEPTH M	TEMPERATURE C	SALINITY PARTS/1000	SIGMA-T	FLOUROMETRIC CHLOROPHYLL UG/L	PHAEOPHYTIN UG/L
ESTIMATED DEPTH M	ACCEPTED DEPTH M	PHOSPHATE UG-AT/L	SILICATE UG-AT/L	NITRATE UG-AT/L	NITRITE UG-AT/L	PARTICLE VOLUME MM3/LITER

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
1	30 JUN 78	05:34:00	40 36.1 N	72 25.4 W	40	7
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
30		5	28	1	2	12.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
18.0		X1	3	1	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	16.97	30.605	22.180	0.95	0.17
10	11	8.17	32.137	25.027	0.17	0.03
20	20	7.25	32.174	25.184	1.77	0.51
30	30	6.21	32.242	25.373	0.37	0.26
40	40	5.98	32.294	25.443	0.45	0.32

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.38	8.12	0.16	0.06	2.31
10	11	0.43	5.64	0.10	0.03	2.74
20	20	0.67	5.63	0.12	0.04	0.89
30	30	0.92	11.99	1.21	0.09	0.69
40	40	1.03	12.66	1.74	0.09	6.76

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE 11 HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
2	30 JUN 78	10:02:00	40 41.7 N	72 28.0 W	38	6
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
31		5	28	2	2	12.5
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
19.5		X0			6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	16.22	30.526	22.288	0.78	0.19
10	10	13.30	31.148	23.378	0.54	0.19
20	20	10.44	31.382	24.080	0.83	0.34
30	30	7.68	32.078	25.051	0.45	0.42
35	35	7.23	32.179	25.192	0.21	0.13

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.52	6.50	0.10	0.04	2.39
10	10	0.48	8.08	0.04	0.05	1.85
20	20	0.77	10.16	0.62	0.08	0.98
30	30	1.11	14.77	2.68	0.13	0.55
35	35	0.85	11.79	1.16	0.10	1.23

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
3	30 JUN 78	11:49:00	40 47.3 N	72 31.3 W	22	5
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
31		9	28	2	6	12.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
20.0		X1	1	1	7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	15.40	30.715	22.612	0.34	0.08
10	10	13.87	30.786	22.986	1.51	0.47
20	20	10.91	31.335	23.965	1.51	0.61

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.62	7.26	0.08	0.05	2.24
10	10	0.51	6.51	0.06	0.04	2.89
20	20	0.96	8.68	0.32	0.07	1.42

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:00

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
4	30 JUN 78	14:46:00	40 30.4 N	72 22.5 W	47	9
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
27		4	28	2		11.5
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
22.7		X0		0	7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	17.98	30.777	22.073	0.57	0.21
10	10	8.70	32.108	24.924	0.76	0.53
20	20	6.73	32.216	25.286	2.66	0.96
30	30	5.60	32.325	25.512	0.35	0.17
40	40	5.32	32.353	25.566	0.09	0.05
45	45	5.25	32.374	25.591	0.09	0.15

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.38	6.21	0.04	0.04	2.36
10	10	0.62	5.26	0.09	0.04	4.95
20	20	0.92	8.44	0.37	0.08	2.43
30	30	0.96	14.12	2.36	0.13	0.62
40	40	1.09	14.43	2.71	0.13	0.76
45	45	1.41	14.88	3.14	0.17	0.97

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
5	30 JUN 78	16:41:00	40 24.4 N	72 18.7 W	55	10
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
28		4	27	1	2	10.5
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
21.7		X1	1	1	4	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLUOROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	19.32	30.692	21.681	0.48	0.06
10	10	14.31	31.948	23.791	0.09	0.03
20	19	8.26	32.115	24.997	1.42	0.56
30	29	6.65	32.290	25.355	3.67	0.66
40	38	6.20	32.520	25.593	0.41	0.24
50	48	4.73	32.502	25.750	0.16	0.15
55	52	4.69	32.508	25.759	0.11	0.13

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.28	9.41	0.17	0.06	2.79
10	10	0.32	9.56	0.10	0.03	4.35
20	19	0.49	7.72	0.08	0.04	3.95
30	29	0.86	9.64	0.12	0.04	2.79
40	38	0.69	10.14	0.54	0.10	1.18
50	48	1.07	14.75	3.18	0.22	2.03
55	52	1.11	14.61	3.29	0.23	0.88

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
6	30 JUN 78	18:34:00	40 19.0 N	72 15.8 W	57	9
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
33		7	27	2	2	11.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
22.0		X1		1	4	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	20.17	30.759	21.514	0.45	0.08
10	10	12.96	31.066	23.381	0.21	0.00
20	19	9.98	32.378	24.932	0.50	0.28
30	29	7.15	32.489	25.445	0.99	0.42
40	39	5.77	32.495	25.625	0.62	0.40
50	48	4.62	32.526	25.780	0.08	0.16

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.21	7.50	0.11	0.04	2.11
10	10	0.35	7.53	0.14	0.05	1.61
20	19	0.45	7.39	0.11	0.05	2.89
30	29	0.47	7.44	0.09	0.04	0.98
40	39	0.90	8.75	0.97	0.16	0.46
50	48	1.11	12.40	3.09	0.22	0.51

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
7	30 JUN 78	20:38:00	40 13.3 N	72 11.0 W	64	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
33		5	27	1	2	12.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
19.5		X1	3	2	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	20.08	30.574	21.398	0.54	0.10
10	10	16.56	31.616	23.045	0.50	0.14
20	20	8.63	32.436	25.192	0.95	0.41
30	30	6.04	32.557	25.642	0.99	0.28
40	40	5.17	32.615	25.791	0.50	0.24
50	50	4.64	32.608	25.842	0.08	0.11
60	60	4.63	32.619	25.853	0.08	0.11

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.25	6.37	0.08	0.04	2.20
10	10	0.23	7.00	0.09	0.05	1.52
20	20	0.23	7.23	0.09	0.04	1.41
30	30	0.23	6.57	0.24	0.07	1.27
40	40	0.23	9.78	2.43	0.41	0.76
50	50	0.23	12.41	3.96	0.45	0.72
60	60	0.23	12.40	4.25	0.50	0.55

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
8	30 JUN 78	22:17:00	40 7.6 N	72 7.0 W	68	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
00		4	27	2	2	13.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
19.0		X	X	9		

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	20.30	30.943	21.620	1.07	0.10
10	10	17.28	31.370	22.690	0.62	0.11
20	20	13.05	32.417	24.406	0.54	0.15
30	30	7.59	32.615	25.484	0.48	0.24
40	40	5.24	32.582	25.756	0.58	0.20
50	50	4.76	32.647	25.861	0.21	0.18
65	65	4.15	32.658	25.933	0.04	2.00

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.40	5.09	0.14	0.02	1.61
10	10	0.45	5.25	0.11	0.04	1.32
20	20	0.61	5.52	0.09	0.03	0.86
30	30	0.74	5.42	0.13	0.03	1.52
40	40	1.25	7.60	1.24	0.29	0.48
50	50	1.12	9.90	3.50	0.61	0.42
65	65	1.11	10.03	3.99	0.63	0.65

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
9	1 JUL 78	00:01:00	40 2.0 N	72 6.2 W	73	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
32		6				13.8
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
20.0		X	X	9	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	20.41	31.171	21.766	1.61	0.53
10	9	18.40	31.550	22.560	0.83	0.29
20	19	12.00	32.957	25.025	0.37	0.19
30	28	7.26	32.639	25.548	0.57	0.37
40	38	5.04	32.576	25.775	0.43	0.24
50	47	5.64	32.773	25.861	0.60	0.47
60	56	6.34	32.953	25.916	0.34	0.37
70	66	5.29	32.884	25.990	0.16	0.25

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.10	4.39	0.01	0.05	-
10	9	0.15	4.49	0.01	0.05	-
20	19	0.36	5.14	0.02	0.05	-
30	28	0.40	4.78	0.05	0.05	-
40	38	0.87	8.36	1.85	0.30	-
50	47	0.79	6.43	1.69	0.42	-
60	56	0.72	6.36	2.03	0.52	-
70	66	0.98	5.11	2.14	0.66	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
10	1 JUL 78	02:04:00	39 56.0 N	72 3.5 W	82	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
34		6	34	2		13.9
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
18.9		X			7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	19.92	31.252	21.952	1.91	0.51
10	8	19.38	31.455	22.245	1.27	0.24
20	16	13.85	32.477	24.293	0.19	0.07
30	24	9.53	32.627	25.200	0.52	0.21
40	32	6.87	32.753	25.693	1.13	0.40
50	40	6.15	32.797	25.817	1.86	0.82
60	49	5.85	32.855	25.900	0.34	0.27
70	57	5.86	32.896	25.931	0.15	0.13
80	65	8.63	33.516	26.035	0.08	0.08

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.13	3.86	0.05	0.05	-
10	8	0.09	3.77	0.07	0.06	-
20	16	0.29	4.73	0.05	0.04	-
30	24	0.38	4.70	0.05	0.05	-
40	32	0.49	5.37	0.06	0.05	-
50	40	0.73	5.74	1.03	0.22	-
60	49	0.83	5.95	2.42	0.63	-
70	57	0.77	6.36	2.28	0.60	-
80	65	0.67	5.65	2.35	0.57	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
11	1 JUL 78	04:08:00	39 50.2 N	72 0.0 W	113	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
35		9	31	3		14.1
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
18.3		X				

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLUOREMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	19.58	31.614	22.316	0.57	0.17
10	8	19.19	31.711	22.486	0.54	0.17
20	17	13.49	32.567	24.434	0.32	0.08
30	25	6.62	32.635	25.631	0.83	0.34
40	34	5.84	32.760	25.827	0.47	0.26
50	42	5.90	32.898	25.929	0.18	0.20
60	51	6.60	33.123	26.016	0.17	0.14
70	59	9.14	33.848	26.215	0.14	0.14
80	68	9.98	34.343	26.463	-	-
100	85	11.62	34.990	26.673	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.20	4.99	0.17	0.03	0.99
10	8	0.22	6.54	0.11	0.04	0.93
20	17	0.26	5.82	0.02	0.03	1.31
30	25	0.51	6.11	0.02	0.03	2.23
40	34	0.70	7.08	1.92	0.40	1.74
50	42	0.78	8.45	2.62	0.54	0.70
60	51	0.64	6.96	3.01	0.40	0.68
70	59	0.61	7.37	5.37	0.21	0.43
80	68	0.70	9.17	6.44	0.08	-
100	85	0.64	7.89	7.87	0.09	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE 11 HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
12	1 JUL 78	08:43:00	39 44.4 N	71 57.0 W	172	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
32		6	34			16.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
19.5		X1	2	2	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLUOROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	19.69	32.460	22.929	0.25	0.09
10	10	19.91	32.785	23.120	0.29	0.15
20	20	18.91	34.583	24.745	0.41	0.12
30	30	16.89	34.819	25.419	0.45	0.18
40	40	13.19	34.665	26.113	0.91	0.55
50	50	13.22	35.043	26.400	0.29	0.10
75	75	12.36	35.010	26.545	0.17	0.08
100	100	11.03	34.982	26.775	0.00	0.05
125	125	11.06	35.150	26.900	-	-
150	150	10.67	35.272	27.065	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.23	4.84	0.05	0.05	0.75
10	10	0.22	4.74	0.05	0.05	0.93
20	20	0.13	4.28	0.04	0.11	1.24
30	30	0.38	4.26	0.03	0.07	1.02
40	40	0.31	5.50	1.11	0.27	0.79
50	50	0.46	5.65	4.24	0.21	0.31
75	75	0.55	6.67	6.68	0.19	0.46
100	100	0.75	7.91	8.99	0.10	0.21
125	125	0.99	10.63	12.63	0.12	0.45
150	150	1.26	12.17	16.65	0.10	0.33

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
13	1 JUL 78	10:52:00	39 38.5 N	71 54.0 W	702	13
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
32		5	34	2	3	17.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
20.0		X1	1	2	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	19.60	32.851	23.251	0.28	0.06
10	10	19.62	34.610	24.584	0.07	0.03
20	19	14.29	34.368	25.656	0.50	0.36
30	29	10.88	33.937	25.990	1.24	0.42
40	39	9.73	33.972	26.215	0.50	0.43
50	49	9.84	34.137	26.326	0.16	0.15
75	73	11.47	34.876	26.612	0.04	0.09
100	97	11.73	35.173	26.794	0.02	0.04
200	194	10.55	35.296	27.106	-	-
500	485	5.19	34.939	27.626	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.19	13.23	0.25	0.07	-
10	10	0.07	12.09	0.12	0.06	-
20	19	0.13	11.69	0.11	0.06	-
30	29	0.22	11.21	0.64	0.12	-
40	39	0.42	11.50	4.34	0.36	-
50	49	0.42	11.27	6.25	0.09	-
75	73	0.60	11.59	6.80	0.12	-
100	97	0.44	12.12	9.93	0.10	-
200	194	0.71	15.14	17.81	0.12	-
500	485	0.69	18.17	18.34	0.08	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
14	1 JUL 78	13:42:00	39 33.6 N	71 50.5 W	915	15
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
32		5	32	2	3	16.5
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
20.5		X1	3	2	7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	20.50	33.111	23.213	0.17	0.03
10	9	19.32	34.413	24.512	0.17	0.03
20	63	15.35	34.175	25.279	0.58	0.17
30	27	7.91	33.187	25.886	1.66	0.47
40	36	8.25	33.396	25.999	1.11	0.31
50	45	10.30	34.153	26.260	0.17	0.13
100	90	11.92	35.213	26.789	-	-
300	270	8.94	35.161	27.273	-	-
500	449	5.82	34.972	27.574	-	-
750	674	4.72	34.970	27.705	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.04	6.14	0.16	0.07	1.52
10	9	0.03	6.87	0.07	0.06	0.67
20	63	0.08	8.59	0.15	0.07	1.37
30	27	0.12	9.23	0.92	0.19	1.46
40	36	0.16	9.18	2.40	0.38	1.13
50	45	0.21	9.43	4.69	0.22	0.46
100	90	0.21	9.55	8.82	0.08	0.11
300	270	0.58	16.22	19.48	0.10	0.07
500	449	0.63	17.64	20.16	0.10	0.19
750	674	0.57	16.29	17.99	0.09	0.27

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
15	2 JUL 78	08:31:00	40 14.1 N	68 46.1 W	134	13
		WIND DIRECTION	WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD
		09	2	00	1	1
		AIR TEMP DRY BULB	WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY
		16.8	X1	2	1	6

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	15.21	32.273	23.849	0.21	0.04
10	10	13.20	32.390	24.348	0.37	0.16
20	20	9.13	32.567	25.216	1.86	0.48
30	30	7.14	32.610	25.541	1.65	0.59
40	40	6.82	32.674	25.634	1.03	0.47
50	50	5.78	32.771	25.843	0.45	0.23
75	75	7.35	33.547	26.249	0.08	0.16
100	100	9.09	34.255	26.541	0.04	0.15
125	125	8.38	34.400	26.766	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.11	6.34	0.24	0.09	0.73
10	10	0.12	6.94	0.14	0.09	0.95
20	20	0.12	10.05	0.71	0.11	1.09
30	30	0.23	7.91	2.37	0.27	0.82
40	40	0.33	6.65	2.93	0.36	0.62
50	50	0.32	8.93	5.31	0.44	0.25
75	75	0.33	7.71	7.43	0.10	0.26
100	100	0.33	13.05	8.63	0.12	0.20
125	125	0.42	16.29	12.00	0.16	0.22

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
16	2 JUL 78	15:56:00	40 21.7 N	67 25.2 W	439	17
WIND DIRECTION	WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE	
03	2	34	2	3	18.8	
AIR TEMP. DRY BULB	WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY		
16.3	X7	0	2	8		

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	13	22.56	34.545	23.735	0.07	0.02
10	24	-	35.556	-	0.05	0.01
20	35	17.18	33.574	24.399	0.21	0.06
30	46	15.51	34.650	25.608	0.49	0.22
40	57	14.37	34.524	25.760	1.18	0.46
50	68	15.02	34.905	25.912	1.18	0.48
75	94	15.62	35.946	26.580	0.10	0.19
100	120	14.59	35.801	26.697	0.05	0.04
200	221	11.57	35.452	27.040	-	-
400	421	6.13	35.028	27.578	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	13	0.10	7.40	0.15	0.04	0.27
10	24	0.05	6.90	0.11	0.04	0.21
20	35	0.18	6.91	0.14	0.04	0.50
30	46	0.20	6.98	0.11	0.04	0.62
40	57	0.36	5.86	0.25	0.10	0.53
50	68	0.31	6.03	1.11	0.22	0.50
75	94	0.63	8.17	8.83	0.10	0.10
100	120	0.77	8.55	10.20	0.10	0.08
200	221	1.14	10.61	14.62	0.06	0.08
400	421	1.51	16.38	20.25	0.07	0.06

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
17	2 JUL 78	18:28:00	40 27.4 N	67 31.7 W	136	14
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
09		2	34	1	1	19.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
19.0		X1	8	1	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	18.34	33.500	24.062	0.17	0.08
10	10	16.48	33.735	24.684	0.08	0.01
20	19	15.04	33.623	24.923	0.50	0.14
30	29	11.82	33.496	25.475	1.61	0.73
40	39	9.64	33.435	25.811	1.16	0.60
50	49	8.97	33.645	26.083	0.41	0.22
60	58	9.10	33.792	26.178	0.37	0.16
75	73	9.91	34.376	26.500	0.04	0.01
100	97	9.88	34.514	26.613	-	-
125	121	9.33	34.547	26.730	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.22	5.93	0.15	0.07	0.61
10	10	0.24	5.78	0.07	0.05	0.54
20	19	0.30	4.99	0.03	0.06	0.63
30	29	0.38	6.12	0.11	0.08	1.18
40	39	0.46	7.04	1.98	0.25	0.62
50	49	0.58	7.81	4.25	0.23	0.31
60	58	0.88	-	7.87	0.09	0.24
75	73	0.76	8.88	7.54	0.08	0.11
100	97	1.02	9.40	8.71	0.08	0.10
125	121	0.77	13.45	7.75	0.14	0.13

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
18	2 JUL 78	20:54:00	40.34.0 N	67 37.6 W	113	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
09		2	34	1	1	19.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.5					6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.76	32.475	24.508	0.33	0.06
10	10	11.76	32.483	24.703	1.16	0.21
20	20	8.55	32.623	25.350	0.17	0.08
30	30	7.61	32.781	25.612	0.83	0.54
40	40	6.62	33.056	25.962	0.33	0.35
50	50	6.61	33.152	26.038	0.25	0.24
60	60	6.77	33.281	26.118	0.08	0.06
75	74	7.04	33.384	26.164	0.08	0.01
100	99	8.26	34.192	26.621	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.32	4.66	0.06	0.04	1.09
10	10	0.41	4.34	0.03	0.04	1.11
20	20	0.53	6.23	2.02	0.26	0.66
30	30	0.80	6.50	3.50	0.33	0.48
40	40	0.88	9.00	6.71	0.21	0.23
50	50	0.86	8.61	6.62	0.17	0.22
60	60	0.91	9.37	7.60	0.15	0.18
75	74	0.97	9.04	7.50	0.15	0.17
100	99	1.10	10.57	10.02	0.17	0.33

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
19	2 JUL 78	23:15:00	40 40.5 N	67 44.0 W	75	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
13		2	34	1	1	20.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.0					8	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.85	32.514	24.521	0.95	0.12
15	15	9.53	32.532	25.125	2.13	0.71
25	25	8.58	32.559	25.295	1.46	0.60
35	34	7.42	32.627	25.517	0.80	0.32
45	44	6.68	32.785	25.741	0.41	0.46
55	54	6.39	32.937	25.898	0.20	0.27
65	64	6.39	32.941	25.901	0.21	0.28

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.31	5.13	0.17	0.09	1.21
15	15	0.40	4.95	0.44	0.17	1.53
25	25	0.59	5.51	1.13	0.20	1.05
35	34	0.70	6.59	2.79	0.44	0.55
45	44	0.73	7.29	4.68	0.35	0.27
55	54	0.76	9.50	6.45	0.30	0.25
65	64	0.94	9.20	6.41	0.34	0.25

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
20	3 JUL 78	01:35:00	40 46.8 N	67 50.0 W	62	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
12		2	34			20.2
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
12.8		X	X	9	7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.56	32.502	24.566	0.68	0.22
10	10	10.29	32.528	24.996	1.92	0.54
20	20	8.18	32.575	25.366	2.19	0.53
30	30	7.27	32.606	25.520	4.13	0.26
40	40	7.04	32.617	25.561	2.36	0.32
50	50	7.02	32.619	25.566	2.15	0.29
60	60	7.01	32.619	25.566	1.64	0.40

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.18	4.98	0.04	0.05	-
10	10	0.22	4.96	0.07	0.05	-
20	20	0.33	4.79	0.10	0.06	-
30	30	0.57	5.50	1.52	0.18	-
40	40	0.52	5.52	1.92	0.19	-
50	50	0.51	5.64	1.88	0.24	-
60	60	0.61	5.94	1.89	0.22	-

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
21	3 JUL 78	03:52:00	40 53.2 N	67 56.0 W	58	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
12		2	34	1		20.1
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
12.8		X0		0	8	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.09	32.555	24.696	0.59	0.18
10	9	10.28	32.561	25.025	2.14	0.95
20	18	9.94	32.563	25.082	2.81	0.55
30	27	9.58	32.567	25.145	2.24	0.77
40	36	9.31	32.571	25.192	2.57	0.87
55	50	9.15	32.575	25.220	2.81	0.70

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.22	6.18	0.21	0.12	-
10	9	0.24	5.56	0.09	0.10	-
20	18	0.30	5.74	0.14	0.10	-
30	27	0.29	5.91	0.13	0.11	-
40	36	0.31	5.80	0.17	0.12	-
55	50	0.28	5.88	0.23	0.12	-

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
22	3 JUL 78	06:00:00	40 59.6 N	68 1.9 W	44	8
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
09		4	34	1	1	21.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
12.0		X1	0	3	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	10.87	32.561	24.923	1.65	0.98
10	10	10.88	32.561	24.920	1.65	0.98
20	20	10.86	32.563	24.925	1.44	0.75
30	30	10.86	32.563	24.926	1.73	0.99
40	40	10.87	32.561	24.924	1.53	0.81

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.25	5.06	0.11	0.09	3.07
10	10	0.27	4.69	0.09	0.11	1.72
20	20	0.17	5.19	0.09	0.09	2.30
30	30	0.26	5.40	0.17	0.13	3.32
40	40	0.27	5.40	0.16	0.09	1.98

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
23	3 JUL 78	08:39:00	41 6.2 N	68 8.3 W	40	8
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
10		4	34	1	1	21.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.0		X1	0	3	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	11.69	32.551	24.767	1.94	0.98
10	10	11.66	32.551	24.774	1.73	0.99
20	20	11.65	32.551	24.776	1.86	0.82
30	30	11.64	32.551	24.776	1.94	0.84
35	35	11.62	32.551	24.781	1.82	0.91

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.26	4.71	0.08	0.14	2.29
10	10	0.29	4.95	0.14	0.13	2.54
20	20	0.28	4.90	0.08	0.11	2.80
30	30	0.22	4.88	0.10	0.09	2.95
35	35	0.26	5.20	0.08	0.07	2.53

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
24	3 JUL 78	10:38:00	41 12.7 N	68 14.3 W	48	6
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
13		4	34	1	1	22.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.0		X1	1	6	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.54	32.528	24.591	2.19	1.12
10	10	12.42	32.528	24.613	2.39	1.36
20	20	12.40	32.528	24.617	-	-
30	30	12.39	32.528	24.620	2.68	1.46
40	40	12.39	32.528	24.619	3.42	2.33

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.21	3.97	0.09	0.13	2.48
10	10	0.25	4.27	0.11	0.16	3.77
20	20	0.30	4.30	0.11	0.11	5.76
30	30	0.29	4.70	0.16	0.10	9.76
40	40	0.27	4.87	0.18	0.13	7.65

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
25	3 JUL 78	12:57:00	41 19.0 N	68 20.7 W	53	-
		WIND DIRECTION	WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD
		12	4	34		
		AIR TEMP DRY BULB	WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY
		15.5	X2	3	7	7

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.86	32.514	24.518	1.68	0.89
10	10	12.50	32.514	24.588	2.09	1.22
20	20	12.42	32.514	24.603	1.33	1.39
30	30	12.39	32.512	24.606	1.90	1.22
40	40	12.40	32.514	24.607	1.86	1.46
50	50	12.39	32.508	24.604	2.72	1.66

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.30	4.16	0.11	0.13	3.94
10	10	0.28	4.00	0.11	0.14	2.44
20	20	0.38	4.00	0.12	0.14	2.52
30	30	0.38	4.26	0.10	0.14	2.09
40	40	0.22	3.96	0.09	0.16	2.70
50	50	0.25	4.33	0.14	0.14	2.59

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31.0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
26	3 JUL 78	15:24:00	41 25.8 N	68 27.2 W	71	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
10		4	34			22.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
15.5						

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.43	32.382	24.498	0.66	0.31
10	10	11.18	32.386	24.733	1.32	0.62
20	20	10.03	32.442	24.973	1.24	0.86
30	30	9.81	32.450	25.017	1.18	0.43
40	40	9.40	32.428	25.066	1.45	0.79
50	50	9.07	32.432	25.121	1.49	0.75
65	65	8.34	32.440	25.238	1.44	0.80

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.24	4.51	0.12	0.16	1.09
10	10	0.41	4.55	0.15	0.17	1.07
20	20	0.33	4.76	0.21	0.19	0.79
30	30	0.28	4.18	0.24	0.17	0.92
40	40	0.43	4.87	0.73	0.20	0.93
50	50	0.58	5.44	1.01	0.22	1.07
65	65	0.60	6.54	2.05	0.26	1.30

- DATA NOT TAKEN

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
27	3 JUL 78	17:49:00	41 32.1 N	68 33.4 W	104	8
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
10		5		1	1	21.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
15.0		X2	3	8	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	13.87	32.030	23.943	1.03	0.28
10	10	10.77	32.321	24.754	2.06	0.47
20	20	8.70	32.172	24.974	0.41	0.12
30	30	8.73	32.368	25.123	2.06	0.37
40	39	6.64	32.290	25.357	0.95	0.37
50	49	5.09	32.506	25.713	0.33	0.21
60	59	4.41	32.641	25.893	0.12	0.12
70	69	4.36	32.713	25.956	0.08	0.11
80	79	4.38	32.750	25.983	-	-
100	98	4.37	32.797	26.021	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.20	4.98	0.14	0.07	1.60
10	10	0.34	4.16	0.16	0.10	1.05
20	20	0.44	5.65	0.74	0.13	1.77
30	30	0.42	4.58	0.48	0.13	0.85
40	39	0.76	8.45	5.76	0.22	0.42
50	49	0.91	8.80	7.09	0.21	0.26
60	59	1.08	9.93	8.77	0.15	0.12
70	69	1.12	10.15	8.80	0.12	0.13
80	79	1.06	11.76	10.11	0.14	0.25
100	98	1.10	11.33	10.23	0.19	0.30

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
28	3 JUL 78	19:59:00	41 38.6 N	68 39.7 W	150	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
10		7	07	1	1	21.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
15.0		X2	3	8	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	16.53	31.299	22.811	0.37	0.07
10	9	16.34	31.314	22.863	0.37	0.16
20	19	12.74	31.692	23.906	1.36	0.34
30	28	6.43	32.222	25.330	0.83	0.34
40	37	5.12	32.430	25.650	0.21	0.23
50	47	4.50	32.545	25.808	0.08	0.16
75	70	4.32	32.836	26.057	0.04	0.15
100	93	4.41	32.924	26.117	0.04	0.08
125	117	4.62	33.064	26.207	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.13	3.74	0.11	0.13	0.81
10	9	0.09	4.18	0.08	0.09	0.63
20	19	0.31	4.65	0.10	0.12	0.94
30	28	0.61	6.33	3.24	0.30	0.29
40	37	0.74	7.21	5.53	0.14	0.12
50	47	0.80	7.11	6.46	0.10	0.13
75	70	1.14	11.79	10.32	0.12	0.15
100	93	1.18	12.52	11.37	0.14	0.37
125	117	1.25	13.44	12.24	0.19	0.50

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
29	3 JUL 78	22:17:00	41 45.0 N	68 46.0 W	176	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
10		10	13	1	1	21.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
15.5		X	X	9	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	15.78	31.326	22.999	0.45	0.18
10	9	13.21	31.401	23.591	0.70	0.32
20	18	9.59	31.717	24.481	1.90	0.83
30	27	7.16	32.298	25.294	0.74	0.33
40	36	5.65	32.454	25.607	0.37	0.21
50	45	5.28	32.541	25.719	0.12	0.27
75	67	4.43	32.691	25.932	0.04	0.15
100	90	4.31	32.863	26.080	0.04	0.10
125	112	4.21	33.162	26.327	-	-
150	135	4.97	33.320	26.370	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.17	3.05	0.04	0.07	0.71
10	9	0.19	4.17	0.12	0.09	0.68
20	18	0.29	4.40	0.12	0.10	1.24
30	27	0.48	4.57	1.00	0.39	0.31
40	36	0.63	5.59	3.56	0.30	0.17
50	45	0.79	7.05	5.93	0.31	0.13
75	67	0.87	7.45	7.25	0.12	0.12
100	90	1.10	9.43	10.00	0.15	0.11
125	112	1.32	14.58	12.93	0.16	0.10
150	135	1.36	15.65	13.92	0.16	0.24

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
30	4 JUL 78	06:49:00	40 51.5 N	67 55.8 W	58	9
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
09		12	12	3	2	16.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.0		X6	8	8	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	11.65	32.524	24.755	0.83	0.25
10	9	11.64	32.524	24.756	0.83	0.25
20	17	11.47	32.534	24.794	0.99	0.18
30	26	9.40	32.563	25.170	1.90	0.34
40	35	9.12	32.569	25.220	1.65	0.39
50	43	9.07	32.569	25.228	2.35	0.47

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.33	3.80	0.16	0.13	1.11
10	9	0.31	3.84	0.14	0.14	0.82
20	17	0.24	3.53	0.10	0.13	1.17
30	26	0.29	3.93	0.16	0.13	1.71
40	35	0.30	3.76	0.15	0.15	1.59
50	43	0.38	3.68	0.10	0.14	1.26

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
31	4 JUL 78	10:51:00	40 43.0 N	68 17.5 W	60	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
07		15	12	3	1	11.1
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.4		X6	8	8	2	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	13.38	32.450	24.365	0.83	0.10
10	9	12.68	32.485	24.530	1.27	0.12
20	17	10.85	32.547	24.915	2.06	0.32
30	26	8.76	32.584	25.289	3.59	0.21
40	35	8.59	32.590	25.317	-	-
50	44	8.17	32.594	25.384	-	-
60	52	8.00	32.598	25.412	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.26	5.32	0.16	0.04	-
10	9	0.31	5.89	0.22	0.04	-
20	17	0.21	4.64	0.08	0.05	-
30	26	0.35	5.63	0.29	0.08	-
40	35	0.32	4.81	0.18	0.08	-
50	44	0.39	5.25	0.40	0.11	-
60	52	0.26	5.91	0.10	0.10	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
32	4 JUL 78	14:55:00	40 34.8 N	68 42.3 W	64	-
		WIND DIRECTION	WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD
		08	15	12		
		AIR TEMP DRY BULB	WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY
		15.6				

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.75	32.386	24.440	0.94	0.17
10	9	12.68	32.388	24.456	0.91	0.11
20	18	9.37	32.553	25.167	1.96	0.43
30	27	7.39	32.610	25.507	2.10	0.48
40	36	7.27	32.617	25.530	1.76	0.31
50	45	7.12	32.625	25.557	1.89	0.44
60	54	7.06	32.625	25.564	1.39	0.32

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.30	5.94	0.12	0.08	0.91
10	9	0.41	6.42	0.68	0.14	1.81
20	18	0.43	5.26	0.44	0.13	1.45
30	27	0.53	6.86	1.16	0.20	2.52
40	36	0.56	6.21	1.13	0.22	1.98
50	45	0.57	6.44	1.37	0.24	1.15
60	54	0.55	6.40	1.36	0.25	1.30

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
33	5 JUL 78	19:09:00	40 31.7 N	69 16.1 W	62	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
00		9	04	3	2	18.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
13.0		X1	3	7	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	11.75	32.345	24.598	1.11	0.20
10	9	11.59	32.355	24.635	1.11	0.30
20	19	8.57	32.536	25.279	1.86	0.38
30	28	7.98	32.555	25.381	1.44	0.41
40	37	7.61	32.567	25.444	1.49	0.66
50	46	7.58	32.567	25.447	1.36	0.49
60	56	7.58	32.567	25.447	1.03	0.48

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.28	5.30	0.09	0.08	1.38
10	9	0.29	5.31	0.12	0.11	1.32
20	19	0.37	5.97	0.77	0.20	1.22
30	28	0.48	6.12	1.04	0.23	1.50
40	37	0.48	6.53	1.13	0.24	1.50
50	46	0.52	6.27	1.20	0.25	1.45
60	56	0.52	6.77	1.29	0.27	1.50

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
34	5 JUL 78	21:18:00	40 34.0 N	69 41.0 W	63	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
01		6	04	2	1	22.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
12.3		X	X	9		

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.41	32.360	24.486	1.03	0.23
10	10	12.43	32.358	24.481	0.25	0.04
20	19	11.42	32.395	24.697	1.40	0.35
30	29	7.77	32.539	25.399	1.32	0.53
40	38	7.00	32.586	25.542	1.44	0.89
50	48	6.90	32.594	25.561	1.53	1.05
60	57	6.87	32.596	25.567	1.24	0.95

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	-	4.32	0.08	0.09	1.30
10	10	0.29	5.55	0.19	0.11	0.75
20	19	0.33	6.09	0.40	0.11	1.16
30	29	0.61	7.40	1.37	0.30	0.95
40	38	0.75	7.83	1.73	0.33	1.12
50	48	0.69	9.69	1.91	0.30	1.49
60	57	0.26	4.97	0.04	0.06	1.10

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
35	5 JUL 78	23:53:00	40 30.5 N	70 6.5 W	62	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
04		2				22.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
12.8					7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	12.61	32.621	24.650	1.65	0.49
10	10	11.83	32.438	24.654	2.07	0.50
20	20	9.11	32.298	25.010	2.10	0.67
30	30	7.23	32.411	25.373	2.35	0.86
40	39	6.73	32.485	25.498	2.36	0.69
50	49	6.51	32.539	25.569	2.39	0.92
60	59	6.45	32.543	25.580	2.50	0.77

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.36	5.83	0.15	0.08	1.62
10	10	0.27	3.10	0.13	0.08	1.83
20	20	0.52	5.11	0.52	0.16	1.29
30	30	0.58	7.35	1.52	0.37	2.11
40	39	0.66	7.84	1.75	0.33	1.56
50	49	0.71	7.58	1.61	0.32	1.38
60	59	0.93	8.39	2.13	0.44	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE 11 HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
36	6 JUL 78	02:18:00	40 34.3 N	70 19.2 W	62	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
30		2	05	1		23.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
11.1		X				

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	15.04	33.130	24.544	0.62	0.29
10	10	15.06	33.130	24.540	0.61	0.32
20	20	14.98	33.130	24.556	0.62	0.30
30	29	10.03	32.602	25.098	1.17	0.46
40	39	6.02	32.545	25.636	1.29	0.53
50	49	5.77	32.617	25.723	0.91	0.36
60	59	5.75	32.625	25.732	0.66	0.43

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.29	5.55	0.20	0.06	-
10	10	0.24	5.92	0.10	0.04	-
20	20	0.22	6.00	0.11	0.04	-
30	29	0.37	6.77	0.10	0.05	-
40	39	0.72	10.22	2.41	0.40	-
50	49	0.81	12.58	3.16	0.39	-
60	59	0.86	12.21	3.14	0.39	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
37	6 JUL 78	05:08:00	40 39.9 N	70 56.6 W	64	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
26		3	04	2	6	23.2
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
13.0		X1	8	1	8	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	13.36	32.871	24.694	0.84	0.36
10	10	13.38	32.873	24.693	0.95	0.21
20	20	13.35	32.875	24.699	0.83	0.25
30	30	9.69	32.481	25.060	1.17	0.45
40	40	6.48	32.473	25.521	0.79	0.63
50	50	6.77	32.964	25.870	0.44	0.24
60	60	6.97	33.074	25.929	0.45	0.28

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.34	6.48	0.11	0.06	-
10	10	0.27	6.53	0.10	0.04	-
20	20	0.27	6.63	0.12	0.07	-
30	30	0.45	7.42	0.68	0.15	-
40	40	0.72	8.50	1.67	0.32	-
50	50	0.73	14.00	3.00	0.44	-
60	60	0.81	16.46	3.61	0.50	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II. HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
38	6 JUL 78	08:18:00	40 36.8 N	71 21.7 W	65	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
20		4	09	1	1	24.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
18.0		X1	3	1	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	13.89	32.393	24.220	0.78	0.19
10	10	13.77	32.392	24.243	0.95	0.27
20	20	8.86	32.489	25.198	-	-
30	30	8.15	32.584	25.650	0.50	0.24
40	40	5.97	32.594	25.680	0.45	0.13
50	50	5.71	32.666	25.768	0.41	0.17
60	60	5.72	32.668	25.769	0.41	0.22

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.33	7.41	0.11	0.00	0.62
10	10	0.32	7.40	0.10	0.00	0.49
20	20	0.78	7.81	0.44	0.04	0.80
30	30	0.67	10.15	0.82	0.05	0.56
40	40	0.68	11.63	0.96	0.05	0.36
50	50	0.76	11.22	1.46	0.15	0.51
60	60	0.81	11.19	1.49	0.15	0.44

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
39	6 JUL 78	10:15:00	40 44.0 N	71 42.0 W	62	11
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
20		4	09	1	2	25.0
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
15.7		X1	3	1	6	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	14.69	31.919	23.687	0.62	0.21
10	10	14.19	31.952	23.818	0.62	0.16
20	20	13.46	32.012	24.013	1.11	0.35
30	30	8.46	32.187	25.023	1.98	1.04
40	40	7.89	32.248	25.153	2.06	1.10
50	50	7.10	32.362	25.353	0.70	0.32
60	60	7.07	32.364	25.358	0.50	0.28

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.28	6.53	0.12	0.05	0.51
10	10	0.24	6.41	0.11	0.05	0.66
20	20	0.26	6.50	0.12	0.03	0.87
30	30	0.46	9.11	0.20	0.08	2.00
40	40	0.47	9.06	0.20	0.09	1.08
50	50	0.68	10.77	0.66	0.09	0.97
60	60	0.66	11.03	0.70	0.09	0.70

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
40	6 JUL 78	12:30:00	40 28.2 N	71 57.2 W	62	12
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
20		5	09			24.2
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
17.8						

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	15.17	32.084	23.712	0.40	0.12
10	10	14.75	32.078	23.797	0.43	0.13
20	20	10.78	32.236	24.686	0.15	0.07
30	30	6.96	32.393	25.395	0.73	0.44
40	40	6.42	32.465	25.523	0.26	0.17
50	50	6.22	32.456	25.540	0.16	0.17
60	59	6.20	32.473	25.556	0.12	0.17

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.19	6.55	0.09	0.05	0.84
10	10	0.20	5.85	0.10	0.05	0.56
20	20	0.24	7.35	0.08	0.06	0.71
30	30	0.57	9.50	0.42	0.10	0.38
40	40	0.72	11.03	0.69	0.14	0.33
50	50	0.72	12.16	1.02	0.15	0.45
60	59	0.74	12.27	1.04	0.15	0.54

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
41	6 JUL 78	15:20:00	40 12.8 N	72 11.5 W	62	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
20		5	09	3	5	23.9
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
17.8		X1	2	5	7	

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	15.90	31.700	23.257	0.51	0.13
10	10	15.30	31.756	23.433	0.59	0.28
20	19	15.01	31.770	23.505	0.95	0.27
30	29	6.90	32.543	25.521	0.68	0.49
40	39	5.37	32.551	25.718	0.19	0.15
50	49	5.34	32.553	25.723	0.12	0.12
60	58	5.33	32.555	25.725	0.15	0.14

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	0.28	5.65	0.09	0.08	1.10
10	10	0.19	5.58	0.07	0.07	0.55
20	19	0.25	5.63	0.06	0.08	0.78
30	29	0.37	5.48	0.09	0.08	0.63
40	39	0.82	11.82	1.32	0.40	0.36
50	49	0.91	12.77	1.50	0.41	0.33
60	58	0.91	12.80	1.46	0.45	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
42	7 JUL 78	03:15:00	41 6.0 N	71 11.5 W	31	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
21		6	09			23.2
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
13.9						

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	13.93	31.452	23.487	-	-
10	10	11.83	31.709	24.091	-	-
20	20	11.40	31.845	24.274	-	-
30	30	11.20	31.839	24.306	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	-	-	-	-	-
10	10	-	-	-	-	-
20	20	-	-	-	-	-
30	30	-	-	-	-	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II HYDROGRAPHY DATA REPORT 05-APR-82 15:31:0

STATION	DATE	MESSENGER TIME	LATITUDE	LONGITUDE	SONIC DEPTH	SECCI DISK
43	7 JUL 78	04:15:00	41 11.2 N	71 12.5 W	35	-
WIND DIRECTION		WIND SPEED	WAVE DIRECTION	WAVE HEIGHT	WAVE PERIOD	BAROMETRIC PRESSURE
23		4	09			23.2
AIR TEMP DRY BULB		WEATHER	CLOUD TYPE	CLOUD AMOUNT	VISIBILITY	
14.4						

ESTIMATED DEPTH	ACCEPTED DEPTH	TEMPERATURE	SALINITY	SIGMA-T	FLOUROMETRIC CHLOROPHYLL	PHAEOPHYTIN
0	0	14.66	31.372	23.275	-	-
10	10	14.67	31.372	23.272	-	-
20	20	13.01	31.756	23.903	-	-
30	30	10.77	31.490	24.109	-	-

ESTIMATED DEPTH	ACCEPTED DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE	PARTICLE VOLUME
0	0	-	-	-	-	-
10	10	-	-	-	-	-
20	20	-	-	-	-	-
30	30	-	-	-	-	-

- DATA NOT TAKEN

XBT Data

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 1 30 JUN 78 0830 40-36.1N 72-25.4W 0040 17.0

	0	1	2	3	4	5	6	7	8	9
0	-	16.78	16.66	15.65	12.81	12.59	12.15	10.90	10.02	9.36
10	8.91	8.59	8.31	8.12	7.92	7.76	7.70	7.58	7.46	7.36
20	7.25	7.17	7.13	7.10	7.09	6.97	6.81	6.74	6.72	6.67
30	6.63	6.62	6.62	6.61	6.57	6.50	6.42	6.15	6.04	5.81
40	5.73	5.71	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 1A DATE 30 JUN 78 TIME 0918 LAT 40-38.9N LON 72-26.5W DEPTH(M) 0036 SST(C) 16.0

	0	1	2	3	4	5	6	7	8	9
0	-	16.36	16.26	16.22	15.36	14.48	14.05	14.11	13.82	12.96
10	11.86	10.84	9.50	8.21	7.86	7.85	7.69	7.52	7.45	7.40
20	7.37	7.33	7.28	7.21	7.15	7.04	6.94	6.82	6.73	6.73
30	6.73	6.73	6.73	6.70	6.68	6.61	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 2A 30 JUN 78 1105 40-44.5N 72-29.5W 0031 15.0

	0	1	2	3	4	5	6	7	8	9
0	-	15.87	15.65	15.12	13.83	13.37	13.25	13.16	12.99	12.80
10	12.67	12.56	12.47	12.35	12.28	12.28	12.33	12.38	12.29	12.23
20	11.97	11.88	11.46	11.19	10.95	10.90	10.85	10.57	10.26	9.86
30	9.53	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 9A 30 JUN 78 1400 40-33.0N 72-24.0W 0047 18.0

	0	1	2	3	4	5	6	7	8	9
0	-	19.04	18.90	18.64	18.13	16.70	14.99	12.52	11.68	10.75
10	10.14	9.78	9.32	8.77	8.60	8.54	8.27	8.00	7.71	7.37
20	7.09	7.03	6.85	6.71	6.58	6.55	6.24	5.98	5.91	5.88
30	5.81	5.74	5.69	5.67	5.60	5.44	5.35	5.34	5.34	5.34
40	5.34	5.34	5.34	5.34	5.33	5.33	5.33	5.32	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 4A 30 JUN 78 1550 40-28.0N 72-21.0W 0054 19.0

	0	1	2	3	4	5	6	7	8	9
0	-	18.56	18.19	17.97	17.48	16.42	15.20	14.41	12.08	10.60
10	10.10	9.74	9.43	9.12	9.11	8.74	8.27	7.98	7.84	7.41
20	7.16	6.93	6.81	6.71	6.60	6.43	6.23	6.00	5.85	5.83
30	5.73	5.61	5.49	5.45	5.42	5.40	5.39	5.37	5.23	5.11
40	5.11	5.05	4.92	4.79	4.78	4.78	4.78	4.78	4.78	4.78
50	4.78	4.78	4.78	4.78	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 5A 30 JUN 78 1752 40-22.0N 72-17.0W 0060 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	20.07	19.89	19.42	19.23	18.96	18.41	17.87	17.32	16.07
10	14.38	12.48	11.16	10.46	9.86	9.50	9.33	8.81	8.53	8.54
20	8.41	8.08	7.75	7.72	7.39	7.13	6.92	6.74	6.58	6.50
30	6.33	6.11	6.02	5.94	5.87	5.80	5.75	5.71	5.73	5.69
40	5.37	5.09	4.88	4.79	4.79	4.78	4.69	4.68	4.68	4.67
50	4.67	4.67	4.66	4.66	4.66	4.65	4.65	4.64	4.64	4.64
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 6A DATE 30 JUN 78 TIME 1955 LAT 40-18.0N LON 72-14.0W DEPTH(M) 0060 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	20.21	20.10	20.05	20.02	19.99	19.77	19.29	18.39	17.49
10	16.57	14.57	12.86	11.52	11.21	10.66	9.88	9.36	8.70	8.35
20	7.80	7.39	6.90	6.77	6.74	6.61	6.55	6.47	6.38	6.33
30	6.29	6.25	6.20	6.10	5.97	5.85	5.73	5.57	5.39	5.21
40	5.03	4.67	4.58	4.54	4.53	4.53	4.53	4.53	4.53	4.53
50	4.53	4.53	4.53	4.53	4.54	4.54	4.54	4.54	4.54	4.54
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 7A DATE 30 JUN 78 TIME 2140 LAT 40-10.0N LON 72-11.0W DEPTH(M) 0069 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	20.10	20.06	20.03	19.99	19.85	19.56	19.14	18.83	18.59
10	18.28	16.60	14.48	13.17	12.09	11.74	10.86	10.11	9.51	9.17
20	8.88	8.41	7.96	7.47	7.33	7.05	6.79	6.65	6.53	6.44
30	6.40	6.25	6.08	5.91	5.80	5.68	5.56	5.45	5.33	5.21
40	5.10	5.07	5.07	5.07	5.03	5.01	4.96	4.78	4.72	4.67
50	4.63	4.62	4.61	4.60	4.60	4.60	4.60	4.60	4.60	4.60
60	4.60	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 8A DATE 30 JUN 78 TIME 2318 LAT 40-05.0N LON 72-08.0W DEPTH(M) 0073 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	20.50	20.45	20.43	20.41	20.21	19.82	19.52	18.95	18.13
10	16.85	16.20	15.63	15.20	14.73	14.08	13.61	12.96	12.14	11.48
20	9.99	9.15	8.90	8.34	7.90	7.89	7.53	7.42	7.22	7.11
30	6.88	6.85	6.67	6.28	6.00	5.90	5.81	5.60	5.47	5.49
40	5.49	5.27	5.02	4.84	4.83	4.83	4.83	4.83	4.83	4.81
50	4.79	4.78	4.77	4.76	4.74	4.73	4.73	4.73	4.74	4.74
60	4.74	4.74	4.76	4.77	4.78	4.82	4.86	4.91	4.94	4.98
70	5.03	5.10	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 9A 01 JUL 78 0115 39-55.0N 72-04.0W 0078 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	20.10	20.07	20.06	20.04	19.97	19.83	19.45	19.28	19.11
10	18.96	18.69	18.62	18.28	17.78	17.10	16.87	15.84	15.22	15.16
20	14.97	15.29	14.62	13.65	12.11	10.33	9.17	8.65	8.21	7.94
30	7.46	7.33	7.14	6.93	6.81	6.69	6.50	6.26	6.14	6.10
40	6.06	5.91	5.80	5.68	5.58	5.51	5.44	5.33	5.36	5.39
50	5.52	5.54	5.54	5.54	5.57	5.69	5.82	5.95	6.00	6.03
60	6.10	6.18	6.00	5.87	5.77	5.63	5.51	5.41	5.29	5.15
70	5.07	5.07	5.07	5.17	5.64	6.50	7.52	7.89	8.18	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 10A 01 JUL 78 0314 39-53.0N 72-01.6W 0087 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	19.98	19.98	19.85	19.55	18.66	17.02	15.49	14.65	14.03
10	13.80	13.44	13.07	12.56	12.06	12.00	11.96	11.87	11.02	10.53
20	10.23	10.05	9.88	9.46	8.87	8.53	8.17	7.74	7.53	7.11
30	7.90	6.87	6.78	6.78	6.76	6.68	6.60	6.52	6.32	6.21
40	6.21	6.13	6.13	6.33	6.75	7.06	7.14	7.10	7.09	7.11
50	7.12	7.18	7.20	7.22	7.32	7.34	7.49	7.74	8.04	8.32
60	8.55	8.77	8.72	8.71	8.70	8.69	8.88	9.07	9.19	9.46
70	9.83	10.58	11.01	10.83	10.65	10.60	10.73	10.74	10.67	10.50
80	10.37	10.56	10.62	10.69	10.76	10.89	11.10	11.40	11.40	11.40
90	11.40	11.40	11.40	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 11R 01 JUL 78 0757 39-47:0N 71-58.0W 0143 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	19.49	19.41	19.35	19.25	19.01	18.96	18.92	18.83	18.72
10	17.33	15.74	15.24	14.94	14.81	15.25	15.45	15.75	16.47	16.65
20	15.56	14.17	12.55	11.40	10.67	10.13	9.97	9.97	8.76	8.05
30	8.15	8.14	8.25	8.66	8.96	9.04	9.47	10.03	10.59	10.07
40	9.39	9.01	8.81	8.49	8.24	8.04	8.08	8.31	8.34	8.38
50	8.47	8.98	9.11	9.16	9.18	9.19	9.48	10.06	10.34	10.59
60	10.74	10.88	11.03	11.17	11.22	11.25	11.24	11.10	11.09	10.99
70	10.81	10.78	10.75	10.71	10.68	10.66	10.66	10.66	10.67	10.68
80	10.69	10.70	10.71	10.72	10.73	10.74	10.76	10.79	10.82	10.87
90	10.95	10.95	10.94	10.93	10.92	10.92	10.92	10.91	10.91	10.91
100	10.91	10.91	10.90	10.90	10.86	10.83	10.83	10.83	10.83	10.84
110	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84
120	10.91	10.91	10.91	10.92	10.92	10.92	10.92	10.92	10.91	10.87
130	10.82	10.73	10.65	10.63	10.63	10.62	10.61	10.61	10.61	10.61
140	10.60	10.60	10.60	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 12A DATE 01 JUL 76 TIME 0957 LAT 39-41.4N LON 71-55.0W DEPTH(M) 0200 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	20.34	20.20	20.19	20.19	20.19	20.05	19.96	19.89	19.83
10	19.33	18.61	18.58	18.47	18.39	18.37	18.19	18.22	18.54	18.65
20	18.82	18.80	18.56	18.32	18.17	18.09	17.97	17.28	17.01	16.82
30	16.46	16.02	15.08	14.39	13.58	12.79	12.38	12.33	12.05	11.37
40	11.30	11.31	11.35	11.44	11.61	11.71	11.66	11.48	11.27	11.23
50	11.13	10.88	10.89	10.69	10.69	10.69	10.69	10.69	10.69	10.72
60	10.76	10.77	10.79	10.80	10.81	10.90	10.95	10.98	11.00	11.01
70	11.01	11.01	11.01	11.17	11.24	11.31	11.36	11.40	11.43	11.45
80	11.47	11.49	11.50	11.51	11.50	11.49	11.48	11.47	11.46	11.45
90	11.44	11.43	11.41	11.39	11.39	11.39	11.39	11.39	11.39	11.39
100	11.39	11.39	11.39	11.39	11.39	11.39	11.39	11.50	11.48	11.47
110	11.46	11.45	11.43	11.43	11.46	11.45	11.43	11.41	11.41	11.41
120	11.41	11.42	11.42	11.42	11.43	11.43	11.43	11.44	11.43	11.42
130	11.41	11.40	11.39	11.38	11.37	11.37	11.37	11.37	11.37	11.37
140	11.37	11.36	11.35	11.35	11.34	11.33	11.32	11.31	11.31	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 14A DATE 01 JUL 78 TIME 1635 LAT 39-47.0N LON 71-58.0W DEPTH(M) 0147 SST(C) SSST

TEMPERATURE (C)

	0	1	2	3	4	5	6	7	8	9
0	20.05	19.89	19.52	19.35	19.21	19.00	18.94	18.88	18.82	18.77
10	18.75	18.35	17.81	17.81	16.29	16.81	17.35	17.35	17.17	16.96
20	16.51	15.36	13.27	12.00	11.15	11.25	12.27	13.95	13.96	11.62
30	10.99	10.97	11.15	10.60	9.81	9.03	8.87	9.14	10.79	11.04
40	11.18	11.32	11.41	11.74	12.22	12.50	12.65	12.77	12.67	12.03
50	11.48	11.10	10.98	11.01	11.11	11.22	11.25	11.23	11.21	11.18
60	11.15	11.12	11.08	11.04	10.97	10.85	10.79	10.77	10.76	10.74
70	10.78	10.82	10.86	10.89	10.92	10.95	10.98	10.98	10.98	10.98
80	10.97	10.97	10.96	10.96	10.95	10.94	10.93	10.92	10.91	10.91
90	10.90	10.88	10.87	10.86	10.85	10.85	10.85	10.84	10.84	10.84
100	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.84	10.85
110	10.84	10.84	10.83	10.83	10.82	10.82	10.83	10.86	10.88	10.92
120	10.96	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.97
130	10.96	10.95	10.94	10.92	10.89	10.85	10.81	10.73	10.66	10.58
140	10.54	10.50	10.48	10.48	10.48	10.48	10.48	10.48	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 16A 02 JUL 78 1729 40-29.0N 67-28.0W 0237 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	18.51	18.34	18.31	18.27	18.14	18.06	18.10	18.13	18.09
10	18.12	18.26	18.30	18.19	17.96	17.62	17.55	17.48	17.41	17.33
20	17.14	16.86	16.58	16.16	15.52	15.03	14.77	14.23	13.87	13.82
30	13.82	13.77	13.63	13.31	13.39	13.30	13.17	12.79	13.15	13.47
40	13.48	13.09	12.30	11.87	11.16	10.40	10.45	10.56	10.79	10.72
50	10.56	10.38	10.23	10.16	10.26	10.25	10.24	10.23	10.20	10.14
60	10.08	10.02	9.97	9.91	9.72	9.45	9.41	9.40	9.39	9.38
70	9.43	9.50	9.56	9.58	9.59	9.60	9.65	9.71	9.72	9.72
80	9.72	9.77	9.84	9.97	10.24	10.29	10.29	10.19	10.06	10.17
90	10.43	10.91	10.96	10.96	10.96	10.96	10.96	10.96	10.89	10.81
100	10.69	10.62	10.61	10.61	10.61	10.61	10.50	10.50	10.58	10.76
110	10.85	10.85	10.99	10.99	10.99	10.99	10.93	10.83	10.76	10.75
120	10.73	10.72	10.70	10.68	10.66	10.65	10.63	10.61	10.60	10.60
130	10.59	10.59	10.58	10.57	10.57	10.56	10.56	10.55	10.54	10.48
140	10.42	10.39	10.37	10.35	10.33	10.31	10.29	10.27	10.25	10.22
150	10.20	10.20	10.19	10.19	10.18	10.18	10.17	10.17	10.17	10.17
160	10.17	10.17	10.17	10.17	10.17	10.17	10.17	10.17	10.17	10.17
170	10.17	10.17	10.17	10.17	10.17	10.17	10.16	10.15	10.13	10.12
180	10.11	10.10	10.09	10.08	10.07	10.06	10.04	10.03	10.01	10.00
190	9.98	9.95	9.93	9.90	9.87	9.84	9.84	9.84	9.84	9.84
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 17A 02 JUL 78 1957 40-30.8N 67-34.8W 0133 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	14.67	14.15	13.69	13.50	13.44	13.38	13.32	13.18	13.01
10	12.80	12.63	12.36	12.00	11.84	11.69	11.51	11.27	11.18	10.62
20	10.20	9.74	9.64	9.60	9.57	9.54	9.51	9.49	9.29	9.05
30	8.70	8.36	8.21	8.12	8.40	8.51	8.48	8.47	8.25	8.15
40	7.98	7.83	7.68	7.54	7.41	7.26	7.05	6.82	6.63	6.63
50	6.63	6.63	6.67	6.79	6.98	7.08	7.14	7.17	7.34	7.63
60	8.11	8.48	8.28	8.08	8.01	8.07	8.21	8.24	8.27	8.30
70	8.40	8.59	8.66	8.66	8.66	8.66	8.66	8.65	8.65	8.65
80	8.65	8.65	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.65
90	8.65	8.65	8.65	8.66	8.66	8.66	8.67	8.67	8.67	8.67
100	8.69	8.71	8.74	8.76	8.79	8.81	8.83	8.84	8.84	8.85
110	8.85	8.86	8.84	8.78	8.73	8.73	8.68	8.55	8.55	8.55
120	8.55	8.55	8.57	8.61	8.65	8.68	8.69	8.69	8.70	8.70
130	8.71	8.71	8.72	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 10A 02 JUL 78 2220 40-37.0N 67-41.0W 0000 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.95	12.51	12.23	11.98	11.72	11.55	11.41	11.25	10.97
10	10.55	9.91	9.55	9.35	9.08	8.81	8.56	8.30	7.91	7.83
20	7.72	7.61	7.50	7.17	6.91	6.73	6.66	6.60	6.57	6.56
30	6.57	6.59	6.59	6.56	6.53	6.50	6.50	6.50	6.50	6.50
40	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.54
50	6.56	6.53	6.51	6.50	6.49	6.49	6.49	6.49	6.49	6.49
60	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49
70	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49
80	6.49	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 19A 03 JUL 78 0042 40-43.6N 67-47.0W 0068 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	13.88	13.73	13.73	13.65	13.55	13.49	13.49	12.83	12.51
10	12.16	11.79	11.28	10.94	10.83	10.61	10.45	10.34	10.16	9.85
20	9.04	8.75	8.67	8.45	8.15	7.97	7.84	7.71	7.60	7.52
30	7.42	7.30	7.16	7.07	7.03	6.98	6.94	6.91	6.87	6.74
40	6.67	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.66	6.66
50	6.66	6.64	6.63	6.62	6.60	6.59	6.58	6.58	6.58	6.58
60	6.58	6.58	6.58	6.58	6.59	6.59	6.59	6.59	6.59	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 20A DATE 03 JUL 78 TIME 0303 LAT 40-50.1N LON 67-53.0W DEPTH(M) 0069 SST(C) 555T

	0	1	2	3	4	5	6	7	8	9
0	-	12.84	12.55	12.40	12.21	12.18	12.10	12.02	11.95	11.85
10	11.74	11.57	11.30	11.15	11.10	11.10	10.97	10.87	10.77	10.61
20	10.21	9.77	9.45	8.97	8.55	8.47	8.31	8.26	8.25	8.24
30	8.23	8.22	8.22	8.22	8.22	8.15	8.12	8.08	8.07	8.07
40	8.07	8.07	8.07	8.07	8.06	8.03	8.00	8.00	8.00	8.00
50	8.00	8.00	8.00	7.99	7.99	7.97	7.94	7.92	7.91	7.91
60	7.91	7.91	7.91	7.91	7.91	7.91	7.91	7.91	7.91	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 21A 03 JUL 78 0511 40-56.3N 67-59.2W 0052 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	11.39	10.81	10.57	10.49	10.43	10.38	10.32	10.25	10.22
10	10.22	10.22	10.22	10.22	10.22	10.21	10.20	10.18	10.16	10.14
20	10.13	10.13	10.13	10.13	10.13	10.13	10.11	10.09	10.08	10.06
30	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06
40	10.06	10.06	10.06	10.06	10.06	10.07	10.07	10.07	10.07	10.07
50	10.07	10.07	10.07	10.07	10.07	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 22A DATE 03 JUL 78 TIME 0711 LAT 41-03.0N LON 68-05.0W DEPTH(M) 0043 SST(C) 9999

	0	1	2	3	4	5	6	7	8	9
0	-	11.04	10.96	10.95	10.95	10.95	10.95	10.95	10.95	10.95
10	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.96	10.96
20	10.96	10.96	10.96	10.96	10.96	10.96	10.96	10.96	10.96	10.96
30	10.96	10.96	10.96	10.96	10.96	10.96	10.97	10.97	10.97	10.97
40	10.97	10.97	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 23A DATE 03 JUL 78 TIME 1005 LAT 41-09.3N LON 68-00.0W DEPTH(M) 0045 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.46	12.22	12.20	12.20	12.20	12.20	12.20	12.20	12.20
10	12.20	12.20	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21
20	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21
30	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21	12.21
40	12.21	12.21	12.21	12.21	12.21	12.21	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 24A DATE 03 JUL 78 TIME 1203 LAT 41-15.8N LON 68-17.6W DEPTH(M) 0047 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.54	12.40	12.32	12.32	12.32	12.32	12.32	12.32	12.32
10	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33
20	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33
30	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.34
40	12.34	12.34	12.34	12.34	12.34	12.34	12.34	-	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 25A DATE 03 JUL 78 TIME 1421 LAT 41-22.7N LON 68-24.0W DEPTH(M) 0062 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.96	12.01	11.36	11.21	11.12	10.79	10.64	10.57	10.50
10	10.45	10.41	10.39	10.38	10.37	10.35	10.34	10.33	10.30	10.27
20	10.25	10.24	10.23	10.20	10.18	10.16	10.14	10.12	10.11	10.10
30	10.08	10.07	10.03	10.01	10.00	9.98	9.96	9.94	9.93	9.93
40	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93
50	9.93	9.93	9.93	9.94	9.94	9.94	9.94	9.94	9.94	9.94
60	9.94	9.94	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 26A 03 JUL 78 1650 41-29.0N 68-30.2W 0093 555T

	0	1	2	3	4	5	6	7	8	9
0	-	11.97	11.88	11.76	11.74	11.71	11.44	11.19	11.03	10.90
10	10.85	10.83	10.65	10.35	10.21	10.16	10.09	10.00	9.92	9.90
20	9.87	9.85	9.83	9.82	9.81	9.80	9.80	9.80	9.78	9.75
30	9.73	9.73	9.65	9.63	9.60	9.55	9.49	9.42	9.34	9.22
40	9.11	9.09	9.07	9.02	8.96	8.70	8.43	8.19	8.01	7.99
50	7.84	7.48	7.01	6.71	6.42	6.07	5.93	5.79	5.58	5.49
60	5.47	5.44	5.42	5.41	5.36	5.31	5.29	5.27	5.25	5.24
70	5.23	5.23	5.23	5.23	5.22	5.22	5.22	5.21	5.21	5.21
80	5.21	5.21	5.20	5.20	5.20	5.20	5.19	5.19	5.19	5.19
90	5.18	5.18	5.18	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 27A 03 JUL 78 1915 41-36.1N 68-35.5W 0137 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	17.44	17.45	17.45	17.45	17.45	17.45	17.45	17.42	17.25
10	16.84	16.09	15.53	15.39	15.18	14.95	13.91	12.79	11.70	11.48
20	10.80	10.17	9.99	9.84	9.73	9.28	8.72	8.19	7.32	6.42
30	6.04	5.84	5.73	5.69	5.66	5.63	5.61	5.39	5.23	5.17
40	5.15	5.13	5.11	5.07	4.96	4.84	4.75	4.66	4.41	4.24
50	4.26	4.28	4.30	4.32	4.31	4.31	4.30	4.29	4.29	4.28
60	4.28	4.28	4.28	4.28	4.28	4.28	4.28	4.28	4.28	4.28
70	4.28	4.28	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29
80	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29
90	4.29	4.29	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30
100	4.30	4.31	4.31	4.32	4.32	4.33	4.33	4.34	4.34	4.39
110	4.43	4.43	4.43	4.44	4.44	4.44	4.44	4.44	4.44	4.44
120	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44	4.44
130	4.44	4.44	4.45	4.45	4.45	4.45	4.45	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 20A DATE 03 JUL 78 TIME 2130 LAT 41-42.0N LON 68-43.0W DEPTH(M) 0166 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	16.40	16.36	16.36	16.36	16.35	16.35	16.09	15.43	15.37
10	15.26	14.86	14.30	13.58	12.33	11.09	10.66	10.30	9.84	9.39
20	8.75	8.68	8.22	7.72	7.19	7.02	6.65	6.39	5.94	5.76
30	5.75	5.74	5.73	5.72	5.57	5.51	5.47	5.36	5.25	5.25
40	5.24	5.13	5.03	4.98	4.95	4.91	4.87	4.82	4.77	4.73
50	4.69	4.65	4.62	4.60	4.58	4.56	4.55	4.53	4.51	4.50
60	4.49	4.48	4.46	4.44	4.43	4.41	4.39	4.38	4.36	4.34
70	4.34	4.33	4.32	4.32	4.31	4.31	4.31	4.31	4.31	4.31
80	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31
90	4.31	4.31	4.31	4.31	4.31	4.31	4.32	4.32	4.33	4.33
100	4.34	4.35	4.36	4.37	4.39	4.43	4.45	4.45	4.46	4.46
110	4.47	4.47	4.48	4.48	4.49	4.49	4.50	4.51	4.51	4.52
120	4.52	4.53	4.55	4.57	4.59	4.61	4.63	4.65	4.67	4.69
130	4.71	4.74	4.78	4.81	4.84	4.92	5.00	5.01	5.03	5.04
140	5.06	5.07	5.09	5.10	5.10	5.11	5.11	5.11	5.12	5.12
150	5.12	5.12	5.13	5.13	5.13	5.14	5.15	5.15	5.16	5.16
160	5.17	5.17	5.17	5.17	5.17	5.17	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 30A 04 JUL 78 0914 40-48.0N 68-06.0W 0075 SST

	0	1	2	3	4	5	6	7	8	9
0	-	12.73	12.68	12.68	12.67	12.67	12.67	12.67	12.66	12.66
10	12.65	12.64	12.62	12.62	12.61	12.60	12.59	12.47	12.37	12.27
20	11.99	11.47	10.64	10.21	9.71	8.99	8.69	8.56	8.55	8.54
30	8.54	8.53	8.53	8.53	8.53	8.52	8.52	8.52	8.51	8.51
40	8.51	8.51	8.51	8.50	8.50	8.50	8.50	8.49	8.49	8.49
50	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49
60	8.49	8.49	8.49	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 31A 04 JUL 78 1242 40-38.8N 68-30.2W 0067 555T

	0	1	2	3	4	5	6	7	8	9
0	-	13.76	13.16	13.16	13.16	13.07	13.01	12.95	12.90	12.84
10	12.77	12.46	11.97	11.30	9.81	9.33	9.16	8.84	8.54	8.32
20	8.22	7.98	7.82	7.79	7.74	7.66	7.64	7.63	7.62	7.60
30	7.59	7.59	7.58	7.58	7.57	7.57	7.57	7.57	7.56	7.56
40	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.57	7.57
50	7.57	7.56	7.56	7.55	7.55	7.54	7.54	7.53	7.53	7.52
60	7.52	7.52	7.52	7.53	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 32A DATE 04 JUL 78 TIME 1637 LAT 40-39.1N LON 68-55.5W DEPTH(M) 0066 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	11.00	10.79	10.77	10.76	10.75	10.73	10.72	10.72	10.71
10	10.70	10.69	10.68	10.67	10.66	10.34	10.02	8.87	8.48	8.32
20	8.25	8.20	8.20	8.19	8.19	8.17	8.14	8.13	8.12	8.12
30	8.11	8.10	8.10	8.10	8.10	8.10	8.09	8.09	8.09	8.09
40	8.09	8.09	8.09	8.09	8.09	8.09	8.09	8.10	8.10	8.10
50	8.10	8.10	8.10	8.10	8.10	8.10	8.10	8.10	8.10	8.10
60	8.10	8.10	8.11	8.11	8.11	8.11	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 32B DATE 04 JUL 78 TIME 1800 LAT 40-41.1N LON 69-08.0W DEPTH(M) 0062 SST(C) 555T

	0	1	2	3	4	5	6	7	8	9
0	-	11.30	11.20	11.21	11.23	11.22	11.15	11.11	11.09	11.06
10	11.03	11.03	11.02	11.02	11.01	10.93	10.90	10.88	10.85	10.81
20	10.71	10.60	10.57	10.30	10.05	10.03	10.01	9.93	9.93	9.78
30	9.60	9.47	9.39	9.38	9.38	9.33	8.86	8.59	7.92	7.84
40	7.80	7.78	7.72	7.68	7.67	7.63	7.65	7.67	7.66	7.65
50	7.63	7.62	7.62	7.62	7.61	7.61	7.60	7.60	7.60	7.60
60	7.60	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 33 DATE 05 JUL 78 TIME 1915 LAT 40-31.7N LON 69-16.1W DEPTH(M) 0062 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	11.84	11.64	11.60	11.60	11.59	11.58	11.58	11.57	11.56
10	11.56	11.41	11.16	10.74	10.12	9.54	9.27	9.08	8.77	8.33
20	8.13	8.08	8.07	8.06	8.05	8.03	7.98	7.91	7.79	7.75
30	7.68	7.63	7.61	7.60	7.58	7.55	7.54	7.52	7.51	7.50
40	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
60	7.50	7.50	7.50	7.50	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 33A DATE 05 JUL 78 TIME 2007 LAT. 40-30.2N LON. 69-29.2W DEPTH(M) 0061 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.58	12.58	12.58	12.59	12.59	12.60	12.60	12.59	12.58
10	12.58	12.57	12.53	12.47	12.09	11.27	10.28	9.32	8.42	7.79
20	7.29	7.21	7.15	7.11	7.08	7.06	7.05	7.04	7.04	7.04
30	7.04	7.03	7.03	7.02	7.01	7.01	7.01	7.00	7.00	7.00
40	7.00	6.99	6.99	6.99	6.99	6.99	6.99	6.99	6.99	6.99
50	6.99	6.99	6.99	7.00	7.00	7.00	7.00	7.00	7.00	7.00
60	7.00	7.00	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 34A DATE 05 JUL 78 TIME 2245 LAT 40-32.5N LON 69-54.0W DEPTH(M) 0067 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.60	12.43	12.39	12.39	12.39	12.39	12.38	12.35	12.31
10	12.25	12.20	12.08	11.70	10.94	10.16	9.54	9.30	8.98	8.58
20	8.48	8.41	8.40	8.39	8.33	8.32	8.31	8.31	8.27	8.18
30	8.08	8.03	7.99	7.92	7.90	7.88	7.82	7.71	7.66	7.62
40	7.59	7.55	7.53	7.51	7.48	7.42	7.42	7.41	7.40	7.39
50	7.37	7.35	7.34	7.34	7.34	7.34	7.34	7.34	7.34	7.34
60	7.34	7.34	7.34	7.34	7.34	7.34	7.34	7.34	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 35A 06 JUL 78 0055 40-31.0N 70-19.2W 0064 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	11.50	11.36	11.33	11.33	11.33	11.33	11.33	11.33	11.33
10	11.33	11.33	11.34	11.40	11.46	11.58	11.77	12.10	12.48	12.82
20	13.05	13.24	13.39	13.53	13.19	12.68	12.49	12.42	12.32	12.18
30	11.97	11.62	11.19	10.81	10.21	9.51	9.00	8.07	6.77	6.30
40	6.10	6.04	6.02	6.02	6.01	6.00	6.00	6.00	6.00	6.00
50	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	5.99	5.99
60	5.99	5.99	5.99	5.99	5.99	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 36A 06 JUL 78 0352 40-37.2N 70-44.5W 0069 555T

	0	1	2	3	4	5	6	7	8	9
0	-	15.12	15.08	15.07	15.05	15.04	15.02	15.01	15.00	14.99
10	14.99	14.99	14.99	14.99	14.96	14.85	14.74	14.63	14.37	13.91
20	12.34	10.82	9.76	8.98	8.29	7.58	7.30	7.11	6.75	6.46
30	6.39	6.37	6.36	6.34	6.34	6.33	6.33	6.33	6.33	6.32
40	6.32	6.32	6.32	6.31	6.31	6.31	6.31	6.30	6.30	6.29
50	6.28	6.27	6.26	6.24	6.23	6.21	6.19	6.17	6.17	6.17
60	6.18	6.18	6.18	6.18	6.18	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 37A 06 JUL 78 0607 40-38.1N 70-08.9W 0060 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	14.15	14.15	14.15	14.15	14.15	14.15	14.15	14.14	14.04
10	13.98	13.88	13.68	13.49	13.46	13.39	13.39	13.39	13.36	13.26
20	13.17	13.09	12.56	11.92	11.14	10.16	8.77	7.13	6.84	6.73
30	6.79	6.73	6.60	6.42	6.42	6.42	6.39	6.23	6.07	5.95
40	6.01	6.03	6.03	6.03	6.03	6.03	6.07	6.16	6.23	6.30
50	6.38	6.45	6.55	6.66	6.77	6.81	6.82	6.82	6.82	6.82
60	6.82	6.82	6.82	6.82	6.82	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 30A DATE 06 JUL 78 TIME 0916 LAT 40-43.3N LON 71-31.7W DEPTH(M) 0069 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	13.75	13.55	13.51	13.51	13.45	13.40	13.36	13.32	13.28
10	13.22	13.13	13.03	12.93	12.85	12.78	12.71	12.62	12.56	12.50
20	12.45	12.41	12.37	12.15	11.97	11.57	10.93	9.98	8.98	8.34
30	7.77	7.37	7.13	6.87	6.79	6.71	6.63	6.56	6.51	6.50
40	6.49	6.48	6.48	6.48	6.48	6.48	6.48	6.48	6.48	6.48
50	6.48	6.48	6.48	6.48	6.48	6.48	6.48	6.48	6.49	6.49
60	6.49	6.49	6.49	6.49	6.49	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 39A 06 JUL 78 1115 40-34.5N 71-48.0W 0064 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	13.77	13.56	13.47	13.36	13.27	13.23	13.21	13.21	13.21
10	13.21	13.21	13.21	13.21	13.20	13.20	13.16	13.10	13.11	13.11
20	13.11	13.03	12.96	12.94	12.94	12.94	12.94	12.94	12.94	12.94
30	12.94	12.91	12.82	12.52	10.64	8.62	8.05	7.88	7.64	7.43
40	7.34	7.12	6.98	6.88	6.81	6.80	6.78	6.78	6.78	6.78
50	6.78	6.78	6.78	6.78	6.78	6.78	6.77	6.77	6.76	6.75
60	6.74	6.74	6.74	6.74	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 40A DATE 06 JUL 78 TIME 1401 LAT 40-19.5N LON 72-02.0W DEPTH(M) 0062 SST(C) 59.5

	0	1	2	3	4	5	6	7	8	9
0	-	15.15	15.05	14.73	14.53	14.20	14.13	14.11	14.07	14.02
10	14.00	14.00	14.00	14.00	13.90	12.50	10.02	8.51	7.40	7.21
20	7.10	7.10	7.00	6.84	6.65	6.54	6.41	6.28	6.21	6.21
30	6.18	6.11	6.01	5.88	5.83	5.77	5.71	5.67	5.63	5.59
40	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58
50	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59
60	5.59	5.59	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 41A DATE 06 JUL 78 TIME 2017 LAT 40-14.0N LON 71-00.0W DEPTH(M) 0122 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	16.72	16.57	16.56	16.45	16.39	16.29	16.23	16.20	16.17
10	16.13	16.08	16.03	16.00	16.00	15.99	15.99	15.98	15.98	15.79
20	15.56	15.47	15.20	14.65	14.17	13.35	12.67	12.33	11.95	11.44
30	10.92	10.43	9.97	9.38	8.87	8.40	8.33	8.43	8.46	8.94
40	9.44	9.73	9.79	9.81	9.63	9.63	9.69	9.90	9.99	10.08
50	10.06	9.84	9.84	10.03	10.08	10.15	10.26	10.34	10.36	10.48
60	10.68	10.82	10.90	10.92	10.94	10.95	10.88	10.98	10.98	10.92
70	10.53	10.46	10.46	10.53	10.69	10.70	10.71	10.72	10.77	10.81
80	10.86	10.86	10.85	10.84	10.73	10.63	10.61	10.57	10.48	10.40
90	10.34	10.28	10.14	10.03	10.02	10.01	10.01	10.01	10.01	10.01
100	10.09	10.11	10.13	10.13	10.13	10.13	10.17	10.22	10.25	10.27
110	10.28	10.28	10.29	10.30	10.30	10.30	10.30	10.30	10.30	10.30
120	10.30	10.30	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 41B 06 JUL 78 2100 40-19.5N 71-02.5W 0097 SST

	0	1	2	3	4	5	6	7	8	9
0	-	16.53	16.35	16.34	16.35	16.35	16.41	16.51	16.51	16.51
10	16.50	16.44	16.39	16.37	16.33	16.26	16.09	15.71	15.23	14.64
20	13.77	13.48	13.09	12.55	11.74	11.03	10.35	9.46	8.30	7.68
30	7.68	7.52	7.04	6.20	5.79	5.60	5.56	5.53	5.63	5.71
40	5.77	5.85	6.01	6.01	6.01	6.02	6.13	6.23	6.38	6.54
50	6.58	6.71	6.83	6.96	7.08	7.28	7.37	7.44	7.54	7.62
60	7.67	7.70	7.73	7.69	7.65	7.64	7.62	7.78	7.91	7.94
70	8.04	8.27	8.77	9.08	9.30	9.45	9.47	9.48	9.50	9.51
80	9.52	9.52	9.53	9.54	9.54	9.54	9.54	9.54	9.54	9.54
90	9.54	9.54	9.54	9.54	9.54	9.54	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 41C 08 JUL 78 2144 40-25.5N 71-03.0W 0085 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	14.35	14.29	14.23	14.30	14.31	14.27	14.15	14.03	13.93
10	13.82	13.72	13.61	13.53	13.35	13.22	13.11	13.01	12.92	12.85
20	12.78	12.69	12.47	12.26	12.05	11.75	11.58	11.47	11.20	10.83
30	9.88	8.79	8.16	7.82	7.54	7.27	7.14	6.65	6.50	6.25
40	5.96	5.73	5.63	5.56	5.57	5.59	5.61	5.71	5.81	5.86
50	5.91	5.82	5.80	5.80	5.72	5.72	5.72	5.77	5.85	5.92
60	5.99	6.23	6.89	7.38	7.82	8.10	8.34	8.58	8.79	8.89
70	8.91	8.93	8.95	8.95	8.95	8.95	8.95	8.95	8.95	8.96
80	8.96	8.96	8.96	8.96	8.96	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT LON DEPTH(M) SST(C)
 410 06 JUL 78 2228 40-32.0N 71-04.0W 0075 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	13.78	13.66	13.64	13.61	13.58	13.51	13.48	13.41	13.08
10	12.87	12.83	12.81	12.79	12.77	12.76	12.74	12.73	12.73	12.73
20	12.74	12.74	12.74	12.73	12.73	12.72	12.70	12.58	12.44	12.36
30	12.30	12.25	12.22	12.17	12.05	11.96	11.60	10.94	10.31	10.10
40	9.60	8.84	8.31	7.91	7.62	7.09	6.85	6.69	6.46	6.28
50	6.20	6.18	6.16	6.15	6.14	6.13	6.13	6.21	6.21	6.21
60	6.51	6.95	7.37	7.67	7.77	7.80	7.61	7.76	8.00	8.28
70	8.56	8.65	8.70	8.70	8.75	8.77	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 41E DATE 06 JUL 78 TIME 2348 LAT 40-43.0N LON 71-07.0W DEPTH(M) 0057 SST(C) SSST

	0	1	2	3	4	5	6	7	8	9
0	-	13.32	13.24	13.24	13.24	13.23	13.22	13.30	13.38	13.40
10	13.40	13.39	13.38	13.37	13.36	13.35	13.33	13.30	13.23	13.11
20	12.98	12.95	12.82	12.49	11.47	10.78	10.53	10.19	9.70	8.86
30	8.56	8.36	8.10	7.90	7.25	6.64	6.52	6.37	6.21	6.19
40	6.19	6.20	6.21	6.22	6.22	6.24	6.25	6.26	6.27	6.27
50	6.28	6.28	6.28	6.28	6.29	6.29	6.29	6.29	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING 41F DATE 07 JUL 70 TIME 0032 LAT 40-49.2N LON 71-08.0W DEPTH(M) 0057 SST(C) 555T

	0	1	2	3	4	5	6	7	8	9
0	13.19	12.70	12.62	12.61	12.60	12.60	12.60	12.60	12.60	12.60
10	12.58	12.52	12.42	12.31	12.27	12.23	12.21	12.20	12.13	11.19
20	9.64	8.65	8.02	7.05	6.70	6.65	6.65	6.65	6.65	6.73
30	6.72	6.71	6.69	6.68	6.66	6.64	6.62	6.61	6.59	6.54
40	6.49	6.47	6.44	6.40	6.40	6.40	6.40	6.40	6.40	6.40
50	6.40	6.40	6.40	6.39	6.39	6.39	6.39	6.39	6.39	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT. LON. DEPTH(M) SST(C)
 41G 07 JUL 78 0117 40-54.7N 71-09.0W 0050 SSST

	0	1	2	3	4	5	6	7	8	9
0	13.92	12.97	12.84	12.81	12.81	12.81	12.78	12.67	12.54	12.06
10	11.68	11.44	11.38	11.36	11.33	11.29	11.23	11.16	11.08	11.00
20	10.83	9.26	7.89	7.44	7.11	6.98	6.97	6.96	6.90	6.82
30	6.82	6.82	6.79	6.73	6.70	6.68	6.65	6.64	6.64	6.64
40	6.64	6.64	6.65	6.65	6.65	6.65	6.65	6.65	6.65	6.65
50	6.65	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

SOUNDING DATE TIME LAT. LON. DEPTH(M) SST(C)
 41H 07 JUL 78 0159 41-00.3N 71-10.3W 0048 SSST

	0	1	2	3	4	5	6	7	8	9
0	-	12.62	12.42	12.12	12.02	12.00	11.96	11.91	11.83	11.78
10	11.75	11.69	11.61	11.52	11.41	11.36	11.31	11.13	10.94	10.73
20	10.41	10.08	9.52	9.35	9.26	9.10	8.96	8.90	8.68	8.55
30	8.45	8.36	8.33	8.32	8.26	8.21	8.21	8.21	8.18	8.12
40	8.04	7.98	7.91	7.88	7.84	7.79	7.77	7.77	-	-
50	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-	-
140	-	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-
170	-	-	-	-	-	-	-	-	-	-
180	-	-	-	-	-	-	-	-	-	-
190	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-

PRODUCTIVITY DATA

T A B L E O F U N I T S

STATION	DATE LOCAL	TIME EDT	LATITUDE DEGREES	LONGITUDE DEGREES	SONIC DEPTH M
	SECCHI DEPTH M	EXTINCTION COEFFICIENT	INCIDENT RADIATION E/M2/HR	SURFACE TEMPERATURE C	
LIGHT DEPTH %	DEPTH M	CHLOROPHYLL FLUOROMETRIC UG/L	PHAEOPHYTIN UG/L	CARBON-14 UPTAKE UG/L/HR	INCUBATION TIME HR
LIGHT DEPTH %	DEPTH M	PHOSPHATE UG-AT/L	SILICATE UG-AT/L	NITRATE UG-AT/L	NITRITE UG-AT/L

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II PRODUCTIVITY DATA REPORT 02-APR-

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
1	30 JUN 78	07:50:00	40 36.0 N	72 24.7 W	40
SECCHI DEPTH	EXTINCTION COEFFICIENT	INCIDENT RADIATION	SURFACE TEMPERATURE		
7	0.256	-	17		

LIGHT DEPTH	DEPTH	CHLOROPHYLL FLUOROMETRIC	PHAEOPHYTIN	CARBON-14 UPTAKE	INCUBATION TIME
100	0	0.95	0.32	1.78	5.25
60	2	0.91	0.21	4.07	5.80
26	5	1.04	0.30	3.61	5.80
15	8	0.21	0.04	3.54	5.80
5	12	2.06	0.86	5.08	5.80
1	13	5.90	1.81	5.71	6.40

LIGHT DEPTH	DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE
100	0	-	-	-	-
60	2	-	-	-	-
26	5	-	-	-	-
15	8	-	-	-	-
5	12	-	-	-	-
1	18	-	-	-	-

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II PRODUCTIVITY DATA REPORT 02-APR-

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
11	1 JUL 78	07:24:00	39 50.2 N	72 0.0 W	113
SECCHI DEPTH	EXTINCTION COEFFICIENT	INCIDENT RADIATION	SURFACE TEMPERATURE		
12	0.124	-	20		

LIGHT DEPTH	DEPTH	CHLOROPHYLL FLUOROMETRIC	PHAEOPHYTIN	CARBON-14 UPTAKE	INCUBATION TIME
100	0	0.54	0.10	1.52	5.30
60	3	0.50	0.14	2.64	5.80
26	8	0.45	0.13	2.53	5.80
15	12	0.45	0.08	1.72	5.80
5	22	0.66	0.17	1.52	5.80
1	37	0.58	0.25	0.39	6.30

LIGHT DEPTH	DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE
100	0	0.22	5.14	0.09	0.06
60	3	0.22	5.25	0.10	0.05
26	8	0.25	5.36	0.10	0.05
15	12	0.42	5.47	0.10	0.05
5	22	0.63	5.28	0.07	0.03
1	37	0.76	7.25	2.34	0.58

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II PRODUCTIVITY DATA REPORT 02-APR-

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
15	2 JUL 78	07:40:00	40 14.1 N	68 46.1 W	134

SECCHI DEPTH	EXTINCTION COEFFICIENT	INCIDENT RADIATION	SURFACE TEMPERATURE
13	0.144	7.97	15

LIGHT DEPTH	DEPTH	CHLOROPHYLL FLUOROMETRIC	PHAEOPHYTIN	CARBON-14 UPTAKE	INCUBATION TIME
100	0	0.25	0.05	0.59	5.00
60	3	0.25	0.05	1.63	5.60
26	7	0.25	0.05	1.80	5.60
15	11	0.41	0.12	1.13	5.60
5	20	0.99	0.28	2.82	5.60
1	32	1.49	0.36	2.16	6.25

LIGHT DEPTH	DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE
100	0	-	-	-	-
60	3	-	-	-	-
26	7	-	-	-	-
15	11	-	-	-	-
5	20	-	-	-	-
1	32	-	-	-	-

- DATA NOT TAKEN

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ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II PRODUCTIVITY DATA REPORT 02-APR-

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
22	3 JUL 78	07:17:00	40 59.6 N	68 1.9 W	44
	SECCHI DEPTH	EXTINCTION COEFFICIENT	INCIDENT RADIATION	SURFACE TEMPERATURE	
	3	0.177	6.44	11	

LIGHT DEPTH	DEPTH	CHLOROPHYLL FLUOROMETRIC	PHAEOPHYTIN	CARBON-14 UPTAKE	INCUBATION TIME
100	0	1.73*	0.80*	1.89	5.25
60	2	-	-	3.37	5.90
26	5	-	-	2.12	5.90
15	8	-	-	2.83	5.90
5	14	-	-	3.18	5.90
1	26	-	-	1.85	6.40

LIGHT DEPTH	DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE
100	0	-	-	-	-
60	2	-	-	-	-
26	5	-	-	-	-
15	8	-	-	-	-
5	14	-	-	-	-
1	26	-	-	-	-

- DATA NOT TAKEN

* WATER COLUMN WELL MIXED-SEE HYDRO STA

ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II PRODUCTIVITY DATA REPORT 02-APR-

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
30	4 JUL 73	07:37:00	40 51.6 N	67 55.9 W	58
SECCHI DEPTH	EXTINCTION COEFFICIENT	INCIDENT RADIATION	SURFACE TEMPERATURE		
9	0.200	1.28	12		

LIGHT DEPTH	DEPTH	CHLOROPHYLL FLUOROMETRIC	PHAEOPHYTIN	CARBON-14 UPTAKE	INCUBATION TIME
100	0	0.95	0.17	4.29	5.55
60	3	1.03	0.14	2.25	6.35
26	7	1.07	0.19	1.98	6.35
15	10	0.99	0.28	0.94	6.35
5	15	1.16	0.21	0.35	6.35
1	23	1.03	0.19	0.11	6.75

LIGHT DEPTH	DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE
100	0	-	-	-	-
60	3	-	-	-	-
26	7	-	-	-	-
15	10	-	-	-	-
5	15	-	-	-	-
1	23	-	-	-	-

- DATA NOT TAKEN

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ATLANTIC COASTAL EXPERIMENT - 4 DELAWARE II PRODUCTIVITY DATA REPORT 02-APR-

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
38	6 JUL 78	07:18:00	40 36.8 N	71 21.7 W	65
	SECCHI DEPTH	EXTINCTION COEFFICIENT	INCIDENT RADIATION	SURFACE TEMPERATURE	
	10	0.177	6.93	14	

LIGHT DEPTH	DEPTH	CHLOROPHYLL FLUOROMETRIC	PHAEOPHYTIN	CARBON-14 UPTAKE	INCUBATION TIME
100	0	-	-	2.93	5.60
60	3	0.74	0.18	2.91	6.20
26	8	0.87	0.30	4.01	6.20
15	11	0.66	0.12	3.96	6.20
5	17	1.07	0.39	2.68	6.20
1	26	0.83	0.25	0.68	6.80

LIGHT DEPTH	DEPTH	PHOSPHATE	SILICATE	NITRATE	NITRITE
100	0	-	-	-	-
60	3	-	-	-	-
26	8	-	-	-	-
15	11	-	-	-	-
5	17	-	-	-	-
1	26	-	-	-	-

- DATA NOT TAKEN

PHYTOPLANKTON DATA

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

TABLE OF UNITS

STATION	DATE	TIME	LATITUDE	LONGITUDE
	LOCAL	LOCAL	DEGREES	DEGREES
	SONIC	SURFACE	ONE % LIGHT	SECCHI
	DEPTH	TEMPERATURE	DEPTH	DEPTH
	M	C	M	M

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
1	30 JUN 78	05:34:00	40 36.1 N	72 25.4 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
40	16.97	-	7	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.0	44.19	1900
GYMNODINIUM SP	2.5	9.30	400
GONYAULAX ORIENTALIS	2.5	9.30	400
MONADI	4.0	6.98	300
CYCLOTELLA SP.	6.5	4.65	200
TINTINNIDA	6.5	4.65	200
PERIDINIUM FAEROENSE	6.5	4.65	200
PERIDINIUM SP.	6.5	4.65	200
DINOPHYSIS PUNCTATA	11.0	2.33	100
PERIDINIUM TROCHOIDEUM	11.0	2.33	100
AMPHIDINIUM SP.	11.0	2.33	100
CERATIUM TRIPOS	11.0	2.33	100
UNIDENTIFIED NANOPLANKTON	11.0	2.33	100
TOTALS	13	100	4300

PERCENT
O F
TOTAL

DIATOM - - - - - 48.84
DINOFLAGELLATE - 37.21
OTHER - - - - - 13.95

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
1	30 JUN 78	05:34:00	40 36.1 N	72 25.4 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
40	16.97	-	7	

DEPTH
20.0

SPECIES	RANK	%	NO/L
CERATIUM TRIPOS	1.0	81.82	29700
CERATIUM LONGIPES	2.0	6.34	2300
TINTINNIDA	4.0	1.93	700
GYMNODINIUM SP	4.0	1.93	700
CERATIUM TRIPOS LONG+SHORT	4.0	1.93	700
DINOPHYSIS PUNCTATA	6.0	1.65	600
PERIDINIUM TROCHOIDEUM	7.0	1.10	400
UNIDENTIFIED NANOPLANKTON	8.0	0.83	300
DINOPHYSIS NORVEGICA	9.5	0.55	200
PERIDINIUM FAEROENSE	9.5	0.55	200
PERIDINIUM CLAUDICANS	13.0	0.28	100
PERIDINIUM SP.	13.0	0.28	100
PERIDINIUM CERASUS	13.0	0.28	100
CERATIUM LINEATUM	13.0	0.28	100
PROROCENTRUM MICANS	13.0	0.28	100
TOTALS	15	100	36300

PERCENT
OF
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 97.25
OTHER - - - - - 2.75

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
2	30 JUN 78	10:02:00	40 41.7 N	72 28.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
38	16.22	-	6

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.0	54.39	3100
PERIDINIUM TROCHOIDEUM	2.0	8.77	500
GONYAULAX ORIENTALIS	3.0	7.02	400
PERIDINIUM CERASUS	5.0	5.26	300
PROROCENTRUM SP.	5.0	5.26	300
PERIDINIUM SP.	5.0	5.26	300
DINOPHYSIS NORVEGICA	7.5	3.51	200
PERIDINIUM FAEROENSE	7.5	3.51	200
CERATIUM FUSUS	10.5	1.75	100
GYMNODINIUM SP	10.5	1.75	100
RHABDOSPHAERA STYLIFER	10.5	1.75	100
CERATIUM LONGIPES	10.5	1.75	100
TOTALS	12	100	5700

PERCENT
O F
TOTAL

DIATOM	54.39
DINOFLAGELLATE	43.86
OTHER	1.75

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
2	30 JUN 78	10:02:00	40 41.7 N	72 28.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
38	16.22	-	6	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA SHRUBSOLEI - - - -	1.0	27.08	1300
DINOPHYSIS ACUTA - - - - -	2.0	25.00	1200
RHABDOSPHAERA STYLIFER - - - -	4.0	8.33	400
DINOPHYSIS PUNCTATA - - - - -	4.0	8.33	400
LEPTOCYLINDRUS DANICUS - - - -	4.0	8.33	400
GYMNODINIUM SP - - - - -	6.0	6.25	300
PERIDINIUM TROCHOIDEUM - - - -	7.5	4.17	200
PERIDINIUM CERASUS - - - - -	7.5	4.17	200
CERATIUM TRIPOS - - - - -	10.5	2.08	100
CYCLOTELLA SP. - - - - -	10.5	2.08	100
GONYAULAX ORIENTALIS - - - - -	10.5	2.08	100
PERIDINIUM FAEROENSE - - - - -	10.5	2.08	100
TOTALS	12	100	4800

PERCENT
O F
TOTAL

DIATOM - - - - - 37.50
DINOFLAGELLATE - 54.17
OTHER - - - - - 8.33

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
3	30 JUN 78	11:49:00	40 47.3 N	72 31.3 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
22	15.40	-	5	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
TINTINNIDA - - - - -	1.0	25.58	1100
GYMNODINIUM SP - - - - -	2.5	11.63	500
DINOPHYSIS NORVEGICA - - - - -	2.5	11.63	500
PERIDINIUM BREVIPIES - - - - -	4.5	9.30	400
RHIZOSOLENIA HEBETATA F. SEMISPINA	4.5	9.30	400
UNIDENTIFIED NANOPLANKTON - - - - -	6.0	6.98	300
AMPHIDINIUM SP. - - - - -	8.0	4.65	200
DINOPHYSIS PUNCTATA - - - - -	8.0	4.65	200
CERATIUM TRIPOS - - - - -	8.0	4.65	200
PERIDINIUM SP. - - - - -	12.0	2.33	100
PERIDINIUM FAEROENSE - - - - -	12.0	2.33	100
PROROCENTRUM MICANS - - - - -	12.0	2.33	100
MONADI - - - - -	12.0	2.33	100
CERATIUM TRIPOS LONG+SHORT - - - - -	12.0	2.33	100
TOTALS	14	100	4300

PERCENT
O F
TOTAL

DIATOM - - - - - 9.30
DINOFLAGELLATE - 55.81
OTHER - - - - - 34.88

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
3	30 JUN 78	11:49:00	40 47.3 N	72 31.3 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
22	15.40	-	5	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	25.49	1300
DINOPHYSIS NORVEGICA - - - - -	2.0	15.69	800
RHIZOSOLENIA HEBETATA F. SEMISPINA - - - - -	3.0	11.76	600
TIHTINNIDA - - - - -	5.0	7.84	400
GYMNODINIUM SP - - - - -	5.0	7.84	400
DINOPHYSIS PUNCTATA - - - - -	5.0	7.84	400
CILIATE - - - - -	8.0	5.88	300
DINOPHYSIS ACUMINATA - - - - -	8.0	5.88	300
DINOPHYSIS ACUTA - - - - -	8.0	5.88	300
UNIDENTIFIED DIATOMS - - - - -	10.0	3.92	200
PERIDINIUM CERASUS - - - - -	11.0	1.96	100
TOTALS	11	100	5100

PERCENT
O F
TOTAL

DIATOM - - - - - 15.69
DINOFLAGELLATE - 70.59
OTHER - - - - - 13.73

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
4	30 JUN 78	14:46:00	40 30.4 N	72 22.5 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
47	17.89	-	9

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.0	78.26	3500
DINOPHYSIS PUNCTATA	2.0	6.52	300
CERATIUM LINEATUM	6.0	2.17	100
RHABDOSPHAERA STYLIFER	6.0	2.17	100
GYMNODINIUM SP	6.0	2.17	100
PERIDINIUM SP.	6.0	2.17	100
CYCLOTELLA SP.	6.0	2.17	100
CERATIUM TRIPOS	6.0	2.17	100
DINOPHYSIS NORVEGICA	6.0	2.17	100
TOTALS	9	100	4600

PERCENT
O F
TOTAL

DIATOM	80.43
DINOFLAGELLATE	17.39
OTHER	2.17

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
4	30 JUN 78	14:46:00	40 30.4 N	72 22.5 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
47	17.89	-	9	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	58.67	8800
RHIZOSOLENIA ALATA - - - - -	2.0	6.67	1000
DINOPHYSIS PUNCTATA - - - - -	3.5	5.33	800
DINOPHYSIS ACUTA - - - - -	3.5	5.33	800
DINOPHYSIS NORVEGICA - - - - -	6.0	4.00	600
GONYAULAX ORIENTALIS - - - - -	6.0	4.00	600
PROROCENTRUM MICANS - - - - -	6.0	4.00	600
DINOPHYSIS ACUMINATA - - - - -	8.5	3.33	500
CERATIUM LONGIPES - - - - -	8.5	3.33	500
GYMNODINIUM SP - - - - -	10.0	2.67	400
CERATIUM LINEATUM - - - - -	11.0	2.00	300
TINTINNIDA - - - - -	12.0	0.67	100
TOTALS	12	100	15000

PERCENT
O F
TOTAL

DIATOM - - - - - 6.67
DINOFLAGELLATE - 92.67
OTHER - - - - - 0.67

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
5	30 JUN 78	16:41:00	40 24.4 N	72 18.7 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
55	19.32	-	10

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	100.00	100
TOTALS	1	100	100

PERCENT
O F
TOTAL

DIATOM - - - - -	0.00
DINOFLAGELLATE -	100.00
OTHER - - - - -	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
5	30 JUN 78	16:41:00	40 24.4 N	72 18.7 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
55	19.32	-	10	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	78.57	1100
CERATIUM LINEATUM - - - - -	2.0	21.43	300
TOTALS	2	100	1400

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 100.00
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
6	30 JUN 78	18:34:00	40 19.0 N	72 15.8 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
57	20.17	-	9	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.0	32.69	1700
PERIDINIUM TROCHOIDEUM - - - - -	2.0	19.23	1000
GONYAULAX ORIENTALIS - - - - -	3.0	15.38	800
UNIDENTIFIED DIATOMS - - - - -	4.5	9.62	500
GYMNODINIUM SP - - - - -	4.5	9.62	500
PROROCENTRUM MICANS - - - - -	6.5	3.85	200
CERATIUM TRIPOS - - - - -	6.5	3.85	200
UNIDENTIFIED NANOPLANKTON - - - - -	9.0	1.92	100
PERIDINIUM SP. - - - - -	9.0	1.92	100
RHABDOSPHAERA STYLIFER - - - - -	9.0	1.92	100
TOTALS	10	100	5200

PERCENT
O F
TOTAL

DIATOM - - - - - 42.31
DINOFLAGELLATE - 53.65
OTHER - - - - - 3.85

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
6	30 JUN 78	18:34:00	40 19.0 N	72 15.8 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
57	20.17	-	9	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
PERIDINIUM TROCHOIDEUM - - - - -	1.0	51.06	2400
DINOPHYSIS NORVEGICA - - - - -	2.0	10.64	500
RHIZOSOLENIA HEBETATA F. SEMISPINA	3.5	8.51	400
GYMNODINIUM SP - - - - -	3.5	8.51	400
PERIDINIUM FAEROENSE - - - - -	5.0	6.38	300
PERIDINIUM CERASUS - - - - -	7.0	4.26	200
CERATIUM LONGIPES - - - - -	7.0	4.26	200
GONYAULAX ORIENTALIS - - - - -	7.0	4.26	200
CERATIUM TRIPOS - - - - -	9.0	2.13	100
TOTALS	9	100	4700

PERCENT
O F
TOTAL

DIATOM - - - - - 8.51
DINOFLAGELLATE - 91.49
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
7	30 JUN 78	20:38:00	40 13.3 N	72 11.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
64	20.08	-	-

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS	1.0	66.67	200
CERATIUM FUSUS	2.0	33.33	100
TOTALS	2	100	300

PERCENT
O F
TOTAL

DIATOM	0.00
DINOFLAGELLATE	100.00
OTHER	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
7	30 JUN 78	20:38:00	40 13.3 N	72 11.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
64	20.08	-	-	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	100.00	900
TOTALS	1	100	900

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 100.00
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
8	30 JUN 78	22:17:00	40 7.6 N	72 7.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
68	20.30	-	-	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GONYAULAX ORIENTALIS - - - - -	1.0	25.49	1300
LEPTOCYLINDRUS DANICUS - - - - -	2.0	19.61	1000
PERIDINIUM TROCHOIDEUM - - - - -	3.0	15.69	800
GYMNODINIUM SP - - - - -	4.0	13.73	700
CERATIUM TRIPOS - - - - -	5.0	7.84	400
UNIDENTIFIED DIATOMS - - - - -	6.0	5.88	300
UNIDENTIFIED NANOPLANKTON - - - - -	7.0	3.92	200
RHABDOSPHAERA STYLIFER - - - - -	9.5	1.96	100
GYMNODINIUM LUNULA - - - - -	9.5	1.96	100
PERIDINIUM FAEROENSE - - - - -	9.5	1.96	100
RHIZOSOLENIA HEBETATA F. SEMISPINA - - - - -	9.5	1.96	100
TOTALS	11	100	5100

PERCENT
O F
TOTAL

DIATOM - - - - - 27.45
DINOFLAGELLATE - 66.67
OTHER - - - - - 5.88

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
8	30 JUN 78	22:17:00	40 7.6 N	72 7.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
68	20.30	-	-

DEPTH
40.0

SPECIES	RANK	%	NO/L
CERATIUM LONGIPES	1.0	33.33	200
GYMNODINIUM SP	3.5	16.67	100
GONYAULAX ORIENTALIS	3.5	16.67	100
DINOPHYSIS ACUMINATA	3.5	16.67	100
PERIDINIUM SP.	3.5	16.67	100
TOTALS	5	100	600

PERCENT
OF
TOTAL

DIATOM	0.00
DINOFLAGELLATE	100.00
OTHER	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION 9 DATE 1 JUL 78 TIME 00:01:00 LATITUDE 40 2.0 N LONGITUDE 72 6.2 W

SONIC DEPTH 73 SURFACE TEMPERATURE 20.41 ONE % LIGHT DEPTH - SECCHI DEPTH -

DEPTH
0.0

SPECIES	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	100.00	200
TOTALS	1	100	200

PERCENT
OF
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 100.00
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
9	1 JUL 78	00:01:00	40 2.0 N	72 6.2 W

SONIC	SURFACE	ONE % LIGHT	SECCHI
DEPTH	TEMPERATURE	DEPTH	DEPTH
73	20.41	-	-

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS	1.0	75.00	300
CERATIUM FUSUS	2.0	25.00	100
TOTALS	2	100	400

PERCENT
O F
TOTAL

DIATOM	0.00
DINOFLAGELLATE	100.00
OTHER	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
9	1 JUL 78	00:01:00	40 2.0 N	72 6.2 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
73	20.41	-	-

DEPTH
30.0

SPECIES	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	100.00	2600
TOTALS	1	100	2600

PERCENT
OF
TOTAL

DIATOM - - - - -	0.00
DINOFLAGELLATE -	100.00
OTHER - - - - -	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
10	1 JUL 78	02:04:00	39 56.0 N	72 3.5 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
82	19.92	-	-	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GONYAULAX ORIENTALIS - - - - -	1.0	31.58	600
CERATIUM TRIPOS - - - - -	2.0	21.05	400
UNIDENTIFIED NAUOPLANKTON - - -	4.0	10.53	200
GYMNODINIUM SP - - - - -	4.0	10.53	200
RHABDOSPHAERA STYLIFER - - - - -	4.0	10.53	200
TINTINNIDA - - - - -	7.0	5.26	100
POLYKRIKOS SP. - - - - -	7.0	5.26	100
DINOPHYSIS ACUMINATA - - - - -	7.0	5.26	100
TOTALS	8	100	1900

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 73.68
OTHER - - - - - 26.32

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
10	1 JUL 78	02:04:00	39 56.0 N	72 3.5 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
82	19.92	-	-

DEPTH
40.0

SPECIES	RANK	%	NO/L
CERATIUM LONGIPES	1.0	92.86	1300
AMPHIDINIUM SP.	2.0	7.14	100
TOTALS	2	100	1400

PERCENT
OF
TOTAL

DIATOM	0.00
DINOFLAGELLATE	100.00
OTHER	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
11PR	1 JUL 78	07:24:00	39 50.2 N	72 0.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
113	-	37.0	12	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GYMNODINIUM SP - - - - -	1.0	42.86	300
CERATIUM TRIPOS - - - - -	2.0	28.57	200
GONYAULAX ORIENTALIS - - - - -	3.5	14.29	100
RHABDOSPHAERA STYLIFER - - - - -	3.5	14.29	100
TOTALS	4	100	700

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLLAGELLATE - 85.71
OTHER - - - - - 14.29

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
11PR	1 JUL 78	07:24:00	39 50.2 N	72 0.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
113	-	37.0	12	

DEPTH
37.0

S P E C I E S	RANK	%	NO/L
MELOSIRA SULCATA - - - - -	1.0	54.55	600
UNIDENTIFIED NANOPLANKTON - - - - -	2.0	18.18	200
GONYAULAX ORIENTALIS - - - - -	4.0	9.09	100
PERIDINIUM SP. - - - - -	4.0	9.09	100
GYMNODINIUM SP - - - - -	4.0	9.09	100
TOTALS	5	100	1100

PERCENT
O F
TOTAL

DIATOM - - - - - 54.55
DINOFLAGELLATE - 27.27
OTHER - - - - - 18.18

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
12	1 JUL 78	08:43:00	39 44.4 N	71 57.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
172	19.69	-	-	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
RHABDOSPHAERA STYLIFER - - - - -	2.0	28.57	200
GYMNODINIUM SP - - - - -	2.0	28.57	200
UNIDENTIFIED NANOPLANKTON - - -	2.0	28.57	200
GYRODINIUM SP. - - - - -	4.0	14.29	100
TOTALS	4	100	700

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 42.86
OTHER - - - - - 57.14

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
12	1 JUL 78	08:43:00	39 44.4 N	71 57.0 W

SONIC	SURFACE	ONE % LIGHT	SECCHI
DEPTH	TEMPERATURE	DEPTH	DEPTH
172	19.69	-	-

DEPTH
40.0

S P E C I E S	RANK	%	NO/L
GYMNODINIUM SP - - - - -	1.0	77.78	700
UNIDENTIFIED NANOPLANKTON - - - - -	2.0	22.22	200
TOTALS	2	100	900

PERCENT
O F
TOTAL

DIATOM - - - - -	0.00
DINOFLAGELLATE -	77.78
OTHER - - - - -	22.22

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
13	1 JUL 78	10:52:00	39 38.5 N	71 54.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
702	19.60	-	13	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.0	100.00	100
TOTALS	1	100	100

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 100.00
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
14	1 JUL 78	13:42:00	39 33.6 N	71 50.5 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
915	20.50	-	15

DEPTH
0.0

SPECIES	RANK	%	NO/L
UNIDENTIFIED NANOPLANKTON - - -	1.0	31.03	900
CYCLOTELLA SP. - - - - -	2.0	20.69	600
GYMNODINIUM SP - - - - -	4.5	10.34	300
RHABDOSPHAERA STYLIFER - - - -	4.5	10.34	300
RHIZOSOLENIA HEBETATA F. SEMISPINA	4.5	10.34	300
CERATIUM FUSUS - - - - -	4.5	10.34	300
CERATIUM TRIPOS - - - - -	7.0	6.90	200
TOTALS	7	100	2900

PERCENT
O F
TOTAL

DIATOM - - - - -	31.03
DINOFLAGELLATE -	27.59
OTHER - - - - -	41.38

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
14	1 JUL 78	13:42:00	39 33.6 N	71 50.5 W

SONIC	SURFACE	ONE % LIGHT	SECCHI
DEPTH	TEMPERATURE	DEPTH	DEPTH
915	20.50	-	15

DEPTH
30.0

S P E C I E S	RANK	%	NO/L
GYMNODINIUM SP	1.0	75.86	2200
UNIDENTIFIED NANOPLANKTON	2.0	17.24	500
RHABDOSPHAERA STYLIFER	3.5	3.45	100
CYCLOTELLA SP.	3.5	3.45	100
TOTALS	4	100	2900

PERCENT
O F
TOTAL

DIATOM	3.45
DINOFLLAGELLATE	75.86
OTHER	20.69

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
15PR	2 JUL 78	07:40:00	40 14.1 N	68 46.1 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
134	-	32.0	13

DEPTH
0.0

SPECIES	RANK	%	NO/L
GYMNODINIUM SP	1.0	45.45	500
DINOPHYSIS NORVEGICA	4.5	9.09	100
PERIDINIUM TROCHOIDEUM	4.5	9.09	100
CHROOMONAS SP.	4.5	9.09	100
DINOPHYSIS PUNCTATA	4.5	9.09	100
CERATIUM TRIPOS	4.5	9.09	100
CERATIUM FUSUS	4.5	9.09	100
TOTALS	7	100	1100

PERCENT
OF
TOTAL

DIATOM	0.00
DINOFLLAGELLATE	90.91
OTHER	9.09

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
15PR	2 JUL 78	07:40:00	40 14.1 N	68 46.1 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
134	-	32.0	13	

DEPTH

32.0

S P E C I E S	RANK	%	NO/L
COCCOLITHUS HUXLEYI - - - - -	1.0	28.57	1000
GYMNODINIUM SP - - - - -	2.5	22.86	800
CERATIUM LONGIPES - - - - -	2.5	22.86	800
PERIDINIUM FAEROENSE - - - - -	5.0	5.71	200
OXYTOXUM SP. - - - - -	5.0	5.71	200
CERATIUM TRIPOS - - - - -	5.0	5.71	200
DINOPHYSIS PUNCTATA - - - - -	8.0	2.86	100
MINUSCULA BIPES - - - - -	8.0	2.86	100
PERIDINIUM TROCHOIDEUM - - - - -	8.0	2.86	100
TOTALS	9	100	3500

PERCENT
O F
TOTAL

DIATOM - - - - -	0.00
DINOFLAGELLATE - - - - -	71.43
OTHER - - - - -	28.57

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
17	2 JUL 78	18:28:00	40 27.4 N	67 31.7 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
136	18.84	-	14	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GYMNODINIUM SP - - - - -	1.0	54.84	1700
PERIDINIUM TROCHOIDEUM - - - - -	2.0	16.13	500
SYNEDRA PULCHELLA - - - - -	3.0	9.68	300
PERIDINIUM FAEROENSE - - - - -	4.0	6.45	200
CHROOMONAS SP. - - - - -	6.5	3.23	100
CERATIUM FUSUS - - - - -	6.5	3.23	100
COCCOLITHUS HUXLEYI - - - - -	6.5	3.23	100
CERATIUM TRIPOS - - - - -	6.5	3.23	100
TOTALS	8	100	3100

PERCENT
O F
TOTAL

DIATOM - - - - - 9.68
DINOFLAGELLATE - 83.87
OTHER - - - - - 6.45

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
17	2 JUL 78	18:28:00	40 27.4 N	67 31.7 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
135	18.84	-	14	

DEPTH
40.0

S P E C I E S	RANK	%	NO/L
COCCOLITHUS.HUXLEYI	1.0	40.00	600
GYMNODINIUM SP	2.0	20.00	300
CERATIUM TRIPOS	3.5	13.33	200
PERIDINIUM TROCHOIDEUM	3.5	13.33	200
CERATIUM LINEATUM	5.5	6.67	100
GYRODINIUM SP.	5.5	6.67	100
TOTALS	6	100	1500

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 60.00
OTHER - - - - - 40.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
19	2 JUL 78	23:15:00	40 40.5 N	67 44.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
75	12.85	-	-	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GONYAULAX ORIENTALIS - - - - -	1.0	54.81	7400
PERIDINIUM TROCHOIDEUM - - - - -	2.0	20.00	2700
PERIDINIUM FAEROENSE - - - - -	3.0	8.89	1200
DINOPHYSIS PUNCTATA - - - - -	4.0	8.15	1100
CERATIUM LINEATUM - - - - -	5.0	4.44	600
CERATIUM TRIPOS - - - - -	6.0	1.48	200
MINUSCULA BIPES - - - - -	8.0	0.74	100
CERATIUM LONGIPES - - - - -	8.0	0.74	100
DINOPHYSIS ACUTA - - - - -	8.0	0.74	100
TOTALS	9	100	13500

PERCENT
O F
TOTAL

DIATOM - - - - - 0.00
DINOFLAGELLATE - 100.00
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
19	2 JUL 78	23:15:00	40 40.5 N	67 44.0 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
75	12.85	-	-	

DEPTH
15.0

S P E C I E S	RANK	%	NO/L
GONYAULAX ORIENTALIS - - - - -	1.0	68.74	17700
CERATIUM LONGIPES - - - - -	2.0	11.26	2900
PERIDINIUM TROCHOIDEUM - - - - -	3.0	6.99	1800
CERATIUM TRIPOS - - - - -	4.0	6.41	1650
GYMNODINIUM SP - - - - -	5.0	2.33	600
CERATIUM TRIPOS LONG+SHORT - - - - -	6.0	1.55	400
DINOPHYSIS PUNCTATA - - - - -	7.0	1.17	300
CYCLOTELLA SP. - - - - -	8.0	0.78	200
COCCOLITHUS HUXLEYI - - - - -	9.5	0.39	100
PERIDINIUM SP. - - - - -	9.5	0.39	100
TOTALS	10	100	25750

PERCENT
O F
TOTAL

DIATOM - - - - - 0.78
DINOFLAGELLATE - 98.83
OTHER - - - - - 0.39

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
21	3 JUL 78	03:52:00	40 53.2 N	67 56.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
58	12.13	-	-

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GONYAULAX ORIENTALIS - - - - -	1.0	58.14	5000
PERIDINIUM TROCHOIDEUM - - - - -	2.0	12.79	1100
CERATIUM TRIPOS - - - - -	3.0	8.14	700
GYMNODINIUM SP - - - - -	4.0	6.98	600
PERIDINIUM FAEROENSE - - - - -	5.0	5.81	500
DINOPHYSIS PUNCTATA - - - - -	6.0	3.49	300
MINUSCULA BIPES - - - - -	8.5	1.16	100
COSCINODISCUS CONCINNUS - - - - -	8.5	1.16	100
RHIZOSOLENIA HEBETATA F. SEMISPINA	8.5	1.16	100
CERATIUM TRIPOS LONG+SHORT - - -	8.5	1.16	100
TOTALS	10	100	8600

PERCENT
O F
TOTAL

DIATOM - - - - -	2.33
DINOFLAGELLATE -	97.67
OTHER - - - - -	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
21	3 JUL 78	03:52:00	40 53.2 N	67 56.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
58	12.13	-	-

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS	1.0	60.00	600
CERATIUM TRIPOS LONG+SHORT	2.0	20.00	200
CERATIUM FUSUS	3.5	10.00	100
CERATIUM LINEATUM	3.5	10.00	100
TOTALS	4	100	1000

PERCENT
O F
TOTAL

DIATOM	0.00
DINOFLAGELLATE	100.00
OTHER	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
22PR	3 JUL 78	07:17:00	40 59.6 N	68 1.9 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
44	-	26.0	8

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GONYAULAX ORIENTALIS	1.0	29.27	1200
CERATIUM TRIPOS	2.0	14.63	600
GYMNODINIUM SP	3.0	9.76	400
PERIDINIUM TROCHOIDEUM	4.0	7.32	300
CHAETOCEROS SIMPLEX	6.0	4.88	200
COCCOLITHUS HUXLEYI	6.0	4.88	200
COSCIINOSIRA SP.	6.0	4.88	200
DINOPHYSIS PUNCTATA	12.5	2.44	100
DINOPHYSIS ACUMINATA	12.5	2.44	100
CERATIUM LONGIPES	12.5	2.44	100
COSCIINODISCUS CONCINNUS	12.5	2.44	100
RHABDOSPHAERA STYLIFER	12.5	2.44	100
PERIDINIUM FAEROENSE	12.5	2.44	100
CERATIUM LINEATUM	12.5	2.44	100
RHIZOSOLENIA HEBETATA F. SEMISPINA	12.5	2.44	100
PLEUROSIGMA SP.	12.5	2.44	100
PERIDINIUM BREVIPIES	12.5	2.44	100
TOTALS	17	100	4100

PERCENT
O F
TOTAL

DIATOM	17.07
DINOFLLAGELLATE	75.61
OTHER	7.32

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
22PR	3 JUL 78	07:17:00	40 59.6 N	68 1.9 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
44	-	26.0	8	

DEPTH
26.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.5	22.22	1000
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.5	22.22	1000
CERATIUM LINEATUM - - - - -	4.0	6.67	300
PERIDINIUM TROCHOIDEUM - - - - -	4.0	6.67	300
GYMNODINIUM SP - - - - -	4.0	6.67	300
NAVICULA SP. - - - - -	9.0	4.44	200
DINOPHYSIS PUNCTATA - - - - -	9.0	4.44	200
COSCINODISCUS RADIATUS - - - - -	9.0	4.44	200
PLEUROSIGMA SP. - - - - -	9.0	4.44	200
PERIDINIUM SP. - - - - -	9.0	4.44	200
GONYAULAX ORIENTALIS - - - - -	9.0	4.44	200
COSCINODISCUS CONCINNUS - - - - -	9.0	4.44	200
PERIDINIUM FAEROENSE - - - - -	13.5	2.22	100
CYCLOTELLA SP. - - - - -	13.5	2.22	100
TOTALS	14	100	4500

PERCENT
O F
TOTAL

DIATOM - - - - - 42.22
DINOFLAGELLATE - 57.78
OTHER - - - - - 0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
23	3 JUL 78	08:39:00	41 6.2 N	68 8.3 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
40	11.69	-	8

DEPTH
0.0

SPECIES	RANK	%	NO/L
RHIZOLENIA HEBETATA F. SEMISPINA	1.0	64.89	7300
CERATIUM TRIPOS	2.0	4.89	550
PERIDINIUM FAEROENSE	3.0	4.44	500
GONYAULAX ORIENTALIS	4.0	3.56	400
CERATIUM LINEATUM	6.0	2.67	300
COSCIINODISCUS CONCINNUS	6.0	2.67	300
DINOPHYSIS PUNCTATA	6.0	2.67	300
PERIDINIUM TROCHOIDEUM	10.5	1.78	200
COSCIINODISCUS SP.	10.5	1.78	200
COCCOLITHUS HUXLEYI	10.5	1.78	200
RHABDOSPHAERA STYLIFER	10.5	1.78	200
POLYKRIKOS SP.	10.5	1.78	200
PERIDINIUM SP.	10.5	1.78	200
PLEUROSIGMA SP.	15.5	0.89	100
CYCLOTELLA SP.	15.5	0.89	100
GYMNODINIUM SP.	15.5	0.89	100
PROROCENTRUM MICANS	15.5	0.89	100
TOTALS	17	100	11250

PERCENT
OF
TOTAL

DIATOM	71.11
DINOFLAGELLATE	25.23
OTHER	3.56

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
25	3 JUL 78	12:57:00	41 19.0 N	68 20.7 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
53	12.86	-	-

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
RHIZOLENIA SHRUBSOLEI	1.0	86.17	24300
CYCLOTELLA SP.	2.0	3.90	1100
COCCOLITHUS HUXLEYI	3.0	1.77	500
CHAETOCEROS AFFINIS	4.5	1.42	400
PERIDINIUM SP.	4.5	1.42	400
CERATIUM TRIPOS	7.0	0.71	200
GYMNODINIUM SP	7.0	0.71	200
COSCINODISCUS CONCINNUS	7.0	0.71	200
PERIDINIUM TROCHOIDEUM	13.0	0.35	100
PLEUROSIGMA SP.	13.0	0.35	100
RHABDOSPHAERA STYLIFER	13.0	0.35	100
GYRODINIUM SP.	13.0	0.35	100
NAVICULA SP.	13.0	0.35	100
PROROCENTRUM MICANS	13.0	0.35	100
DINOPHYSIS PUNCTATA	13.0	0.35	100
POLYKRİKOS SP.	13.0	0.35	100
CERATIUM LINEATUM	13.0	0.35	100
TOTALS	17	100	28200

PERCENT
O F
TOTAL

DIATOM	92.91
DINOFLAGELLATE	4.96
OTHER	2.13

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE
23	3 JUL 78	08:39:00	41 6.2 N	68 8.3 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
40	11.69	-	8	

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.0	56.25	4500
PERIDINIUM TROCHOIDEUM	3.5	5.00	400
GONYAULAX ORIENTALIS	3.5	5.00	400
GYMNODINIUM SP	3.5	5.00	400
PERIDINIUM CLAUDICANS	3.5	5.00	400
CERATIUM TRIPOS	6.5	3.75	300
PERIDINIUM CERASUS	6.5	3.75	300
POLYKRIKOS SP.	9.0	2.50	200
DINOPHYSIS PUNCTATA	9.0	2.50	200
CERATIUM LINEATUM	9.0	2.50	200
RHABDOSPHAERA STYLIFER	14.0	1.25	100
CYCLOTELLA SP.	14.0	1.25	100
DINOPHYSIS ACUTA	14.0	1.25	100
PERIDINIUM FAEROENSE	14.0	1.25	100
PERIDINIUM SP.	14.0	1.25	100
CERATIUM TRIPOS LONG+SHORT	14.0	1.25	100
CERATIUM FUSUS	14.0	1.25	100
TOTALS	17	100	8000

PERCENT
O F
TOTAL

DIATOM	57.50
DINOFLAGELLATE	41.25
OTHER	1.25

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
25	3 JUL 78	12:57:00	41 19.0 N	68 20.7 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
53	12.86	-	-

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
RHIZOSOLENIA HEBETATA F. SEMISPINA	1.0	90.42	32100
CYCLOTELLA SP.	2.0	2.82	1000
MELOSIRA SULCATA	3.0	1.69	600
PERIDINIUM TROCHOIDEUM	4.0	1.41	500
COCCOLITHUS HUXLEYI	5.0	1.13	400
CERATIUM LINEATUM	7.0	0.56	200
GYRODINIUM SP.	7.0	0.56	200
CERATIUM TRIPOS	7.0	0.56	200
CERATIUM FUSUS	10.0	0.28	100
PERIDINIUM SP.	10.0	0.28	100
COSCONODISCUS SP.	10.0	0.28	100
TOTALS	11	100	35500

PERCENT
O F
TOTAL

DIATOM	95.21
DINOFLAGELLATE	3.66
OTHER	1.13

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
26	3 JUL 78	15:24:00	41 25.8 N	68 27.2 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
71	12.43	-	-	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
PERIDINIUM TROCHOIDEUM - - - - -	1.0	24.39	2000
GONYAULAX ORIENTALIS - - - - -	2.0	17.07	1400
PERIDINIUM FAEROENSE - - - - -	3.0	12.20	1000
PERIDINIUM SP. - - - - -	4.0	7.32	600
MELOSIRA SULCATA - - - - -	6.0	6.10	500
POLYKRİKOS SP. - - - - -	6.0	6.10	500
UNIDENTIFIED NANOPLANKTON - - - - -	6.0	6.10	500
RHABDOSPHAERA STYLIFER - - - - -	8.5	3.66	300
GYMNODINIUM SP - - - - -	8.5	3.66	300
PROOCENTRUM MICANS - - - - -	11.5	2.44	200
CERATIUM TRIPOS - - - - -	11.5	2.44	200
DINOPHYSIS PUNCTATA - - - - -	11.5	2.44	200
CYCLOTELLA SP. - - - - -	11.5	2.44	200
COSCONODISCUS SP. - - - - -	15.0	1.22	100
CERATIUM LINEATUM - - - - -	15.0	1.22	100
DINOPHYSIS ACUTA - - - - -	15.0	1.22	100
TOTALS	16	100	8200

PERCENT
O F
TOTAL

DIATOM - - - - - 9.76
DINOFLAGELLATE - 80.49
OTHER - - - - - 9.76

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
26	3 JUL 78	15:24:00	41 25.8 N	68 27.2 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
71	12.43	-	-	

DEPTH
20.0

SPECIES	RANK	%	NO/L
GONYAULAX ORIENTALIS - - - - -	1.0	25.58	1100
PERIDINIUM FAEROENSE - - - - -	2.5	18.60	800
GYMNODINIUM SP - - - - -	2.5	18.60	800
COCCOLITHUS HUXLEYI - - - - -	4.5	11.63	500
CYCLOTELLA SP. - - - - -	4.5	11.63	500
DINOPHYSIS PUNCTATA - - - - -	6.0	6.98	300
CERATIUM TRIPOS - - - - -	8.0	2.33	100
PLEUROSIGMA SP. - - - - -	8.0	2.33	100
COSCINODISCUS SP. - - - - -	8.0	2.33	100
TOTALS	9	100	4300

PERCENT
OF
TOTAL

DIATOM - - - - - 16.28
DINOFLAGELLATE - 72.09
OTHER - - - - - 11.63

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
27	3 JUL 78	17:49:00	41 32.1 N	68 33.4 W

SONIC	SURFACE	ONE % LIGHT	SECCHI
DEPTH	TEMPERATURE	DEPTH	DEPTH
104	13.87	-	8

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
CERATIUM TRIPOS - - - - -	1.5	50.00	100
CERATIUM LINEATUM - - - - -	1.5	50.00	100
TOTALS	2	100	200

PERCENT
O F
TOTAL

DIATOM - - - - -	0.00
DINOFLLAGELLATE -	100.00
OTHER - - - - -	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
29	3 JUL 78	22:17:00	41 45.0 N	68 46.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
176	15.78	-	-

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
GYMNODINIUM SP - - - - -	1.0	26.92	700
PERIDINIUM TROCHOIDEUM - - - - -	2.0	23.08	600
CYCLOTELLA SP. - - - - -	3.5	15.38	400
AMPHIDINIUM SP. - - - - -	3.5	15.38	400
PERIDINIUM FAEROENSE - - - - -	5.0	11.54	300
COSCIINODISCUS CONCINNUS - - - - -	6.5	3.85	100
CERATIUM LONGIPES - - - - -	6.5	3.85	100
TOTALS	7	100	2600

PERCENT
O F
TOTAL

DIATOM - - - - -	19.23
DINOFLAGELLATE - - - - -	80.77
OTHER - - - - -	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
29	3 JUL 78	22:17:00	41 45.0 N	68 46.0 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
176	15.78	-	-

DEPTH
20.0

S P E C I E S	RANK	%	NO/L
PERIDINIUM TROCHOIDEUM - - - - -	1.0	35.71	1500
GYMNODINIUM SP. - - - - -	2.0	23.81	1000
AMPHIDINIUM SP. - - - - -	3.0	19.05	800
GYRODINIUM SP. - - - - -	4.0	7.14	300
COSCIINODISCUS SP. - - - - -	5.5	4.76	200
PERIDINIUM FAEROENSE - - - - -	5.5	4.76	200
CERATIUM LONGIPES - - - - -	7.5	2.38	100
COCCOLITHUS. HUXLEYI - - - - -	7.5	2.38	100
TOTALS	8	100	4200

PERCENT
O F
TOTAL

DIATOM - - - - -	4.76
DINOFLAGELLATE -	92.86
OTHER - - - - -	2.38

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
30PR	4 JUL 78	07:37:00	40 51.6 N	67 55.9 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
58	-	23.0	9	

DEPTH
0.0

SPECIES	RANK	%	NO/L
GONYAULAX ORIENTALIS	1.0	48.08	2500
PERIDINIUM TROCHOIDEUM	3.0	7.69	400
CYCLOTELLA SP.	3.0	7.69	400
COSCINODISCUS RADIATUS	3.0	7.69	400
RHIZOSOLENIA SHRUBSOLEI	5.0	5.77	300
DINOPHYSIS PUNCTATA	6.5	3.85	200
MINUSCULA BIPES	6.5	3.85	200
COCHLODINIUM SP.	11.5	1.92	100
CERATIUM LINEATUM	11.5	1.92	100
GYRODINIUM SP.	11.5	1.92	100
RHABDOSPHAERA STYLIFER	11.5	1.92	100
PERIDINIUM FAEROENSE	11.5	1.92	100
CERATIUM LONGIPES	11.5	1.92	100
PERIDINIUM CERASUS	11.5	1.92	100
AMPHIDINIUM SP.	11.5	1.92	100
TOTALS	15	100	5200

PERCENT
OF
TOTAL

DIATOM - - - - - 21.15
DINOFLAGELLATE - 76.92
OTHER - - - - - 1.92

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
30PR	4 JUL 78	07:37:00	40 51.6 N	67 55.9 W

SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH
58	-	23.0	9

DEPTH
23.0

SPECIES	RANK	%	NO/L
GONYAULAX ORIENTALIS	1.0	51.28	2000
CERATIUM TRIPOS	2.0	7.69	300
CYCLOTELLA SP.	4.0	5.13	200
CERATIUM LONGIPES	4.0	5.13	200
PERIDINIUM FAEROENSE	4.0	5.13	200
CERATIUM LINEATUM	10.5	2.56	100
DINOPHYSIS OVUM	10.5	2.56	100
DINOPHYSIS ACUMINATA	10.5	2.56	100
COSCINODISCUS SP.	10.5	2.56	100
GYRODINIUM SP.	10.5	2.56	100
COCHLODINIUM SP.	10.5	2.56	100
DINOPHYSIS PUNCTATA	10.5	2.56	100
GYMNODINIUM SP.	10.5	2.56	100
PERIDINIUM CLAUDICANS	10.5	2.56	100
MINUSCULA BIPES	10.5	2.56	100
TOTALS	15	100	3900

PERCENT
OF
TOTAL

DIATOM	7.69
DINOFLAGELLATE	92.31
OTHER	0.00

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
38PR	6 JUL 78	07:18:00	40 36.8 N	71 21.7 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
65	-	26.0	9	

DEPTH
0.0

S P E C I E S	RANK	%	NO/L
SYNEDRA PULCHELLA - - - - -	1.0	30.77	400
AMPHIDINIUM SP. - - - - -	2.0	15.38	200
CERATIUM LONGIPES - - - - -	6.0	7.69	100
CERATIUM FUSUS - - - - -	6.0	7.69	100
PERIDINIUM TROCHOIDEUM - - - - -	6.0	7.69	100
COCCOLITHUS HUXLEYI - - - - -	6.0	7.69	100
CYCLOTELLA SP. - - - - -	6.0	7.69	100
PERIDINIUM FAEROENSE - - - - -	6.0	7.69	100
GYMNODINIUM SP - - - - -	6.0	7.69	100
TOTALS	9	100	1300

PERCENT
O F
TOTAL

DIATOM - - - - - 38.46
DINOFLAGELLATE - 53.85
OTHER - - - - - 7.69

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4

DELAWARE II PHYTOPLANKTON

STATION	DATE	TIME	LATITUDE	LONGITUDE
38PR	6 JUL 78	07:18:00	40 38.8 N	71 21.7 W
SONIC DEPTH	SURFACE TEMPERATURE	ONE % LIGHT DEPTH	SECCHI DEPTH	
65	-	26.0	9	

DEPTH
26.0

S P E C I E S	RANK	%	NO/L
CYCLOTELLA SP. - - - - -	1.0	38.46	500
CERATIUM LONGIPES - - - - -	2.0	30.77	400
COCCOLITHUS HUXLEYI - - - - -	3.0	15.38	200
PERIDINIUM TROCHOIDEUM - - - - -	4.5	7.69	100
COSCINODISCUS SP. - - - - -	4.5	7.69	100
TOTALS	5	100	1300

PERCENT
O F
TOTAL

DIATOM - - - - - 46.15
DINOFLAGELLATE - 38.46
OTHER - - - - - 15.38

- DATA NOT TAKEN

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ZOOPLANKTON DATA

T A B L E O F U N I T S

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC
	LOCAL	LOCAL	DEGREES	DEGREES	DEPTH
					M
	SURFACE	NET MOUTH	FLOW METER	NET	
	TEMPERATURE	AREA	FACTOR	MESH	
	C	M2	M/REV	U	

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
1	30 JUN 78	05:55:00	40 36.1 N	72 25.4 W	40.0
<hr/>					
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	16.97	0.2877	0.1570	223	
<hr/>					
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
38.0	260.	11.74	0.025	0.294	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
OITHONA SIMILIS	1.0	660	47.86	2247.97	85423.
PSEUDOCALANUS SPP. C	2.0	480	34.81	1634.89	62126.
PSEUDOCALANUS MINUTUS AF	3.0	110	7.98	374.66	14237.
CHAETOGNATH	4.0	85	6.16	289.51	11001.
CALANUS SPP. C	5.0	23	1.67	78.34	2977.
PSEUDOCALANUS MINUTUS AM	6.0	11	0.80	37.47	1424.
ACARTIA SPP. C	7.0	4	0.29	13.62	518.
TEMORA SPP. C	8.5	2	0.15	6.81	259.
CALANUS FINMARCHICUS A	8.5	2	0.15	6.81	259.
ACARTIA LONGIREMIS AM	10.5	1	0.07	3.41	129.
ACARTIA TONSA AF	10.5	1	0.07	3.41	129.
TOTALS	11	1379	100	4696.90	178482.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.161	14.40	0.0137	0.52
505-1050	0.044	3.94	0.0037	0.14
1050 +	0.913	81.66	0.0777	2.95
TOTALS	1.118	100	0.0952	3.62

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
2	30 JUN 78	10:16:00	40 41.7 N	72 28.0 W	38.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	16.22	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
35.0	270.	11.98	0.033	0.399	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	630	55.46	1577.15	55200.
PSEUDOCALANUS MINUTUS AF	2.0	195	17.17	488.17	17086.
OITHONA SIMILIS	3.0	128	11.27	320.44	11215.
PSEUDOCALANUS MINUTUS AM	4.0	52	4.58	130.18	4556.
TEMORA SPP. C	5.0	50	4.40	125.17	4381.
CHAETOGNATH	6.0	21	1.85	52.57	1840.
TEMORA LONGICORNIS AM	7.0	19	1.67	47.56	1665.
ACARTIA SPP. C	8.0	16	1.41	40.05	1402.
TEMORA LONGICORNIS AF	9.0	9	0.79	22.53	789.
CALANUS SPP. C	10.0	7	0.62	17.52	613.
ACARTIA LONGIREMIS AF	11.0	5	0.44	12.52	438.
CALANUS FINMARCHICUS A	12.0	2	0.18	5.01	175.
ACARTIA LONGIREMIS AM	13.5	1	0.09	2.50	88.
ACARTIA TONSA AM	13.5	1	0.09	2.50	88.
TOTALS	14	1136	100	2843.87	99536.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.046	7.59	0.0038	0.13
505-1050	0.113	18.65	0.0094	0.33
1050 +	0.447	73.76	0.0373	1.31
TOTALS	0.606	100	0.0506	1.77

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
3	30 JUN 78	12:10:00	40 47.3 N	72 31.3 W	22.0
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	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	15.40	0.2827	0.1570	223	
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NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
20.0	190.	8.43	0.083	0.703	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
OITHONA SIMILIS	1.0	780	34.33	1109.93	22199.
PSEUDOCALANUS SPP. C	2.0	490	21.57	697.27	13945.
TEMORA SPP. C	3.0	333	16.95	547.85	10957.
PSEUDOCALANUS MINUTUS AF	4.0	325	14.30	462.47	9249.
TEMORA LONGICORNIS AM	5.0	85	3.74	120.95	2419.
ACARTIA TONSA AM	6.0	57	2.51	81.11	1622.
PSEUDOCALANUS MINUTUS AM	7.0	51	2.24	72.57	1451.
TEMORA LONGICORNIS AF	8.0	36	1.58	51.23	1025.
CHAETOGNATH	9.0	23	1.01	32.73	655.
ACARTIA SPP. C	10.0	20	0.88	28.46	569.
ACARTIA TONSA AF	11.0	9	0.40	12.81	256.
ACARTIA LONGIREMIS AM	12.0	6	0.26	8.54	171.
ACARTIA LONGIREMIS AF	13.0	3	0.13	4.27	85.
CENTROPAGES SPP. C	14.5	1	0.04	1.42	28.
CALANUS SPP. C	14.5	1	0.04	1.42	28.
TOTALS	15	2272	100	3233.04	64661.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.068	6.54	0.0081	0.16
505-1050	0.050	4.81	0.0059	0.12
1050 +	0.921	88.64	0.1092	2.18
TOTALS	1.039	100	0.1232	2.46

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
4	30 JUN 78	14:55:00	40 30.4 N	72 22.5 W	47.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	17.98	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
45.0	320.	14.20	0.033	0.473	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	580	49.15	1225.11	55130.
OITHONA SIMILIS	2.0	300	25.42	633.68	28515.
PSEUDOCALANUS MINUTUS AF	3.0	158	13.39	333.74	15018.
CHAETOGNATH	4.0	50	4.24	105.61	4753.
PSEUDOCALANUS MINUTUS AM	5.0	25	2.12	52.81	2376.
CALANUS SPP. C	6.0	24	2.03	50.69	2281.
ACARTIA SPP. C	7.0	11	0.93	23.23	1046.
TEMORA SPP. C	8.0	10	0.85	21.12	951.
CENTROPAGES TYPICUS AM	9.0	5	0.42	10.56	475.
ACARTIA LONGIREMIS AF	10.5	4	0.34	8.45	380.
CALANUS FINMARCHICUS A	10.5	4	0.34	8.45	380.
ACARTIA LONGIREMIS AM	12.5	3	0.25	6.34	285.
CENTROPAGES TYPICUS AF	12.5	3	0.25	6.34	285.
CENTROPAGES SPP. C	14.0	2	0.17	4.22	190.
ACARTIA TONSA AF	15.0	1	0.08	2.11	95.
TOTALS	15	1180	100	2492.46	112161.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.116	16.57	0.0082	0.37
505-1050	0.043	6.86	0.0034	0.15
1050 +	0.536	76.57	0.0377	1.70
TOTALS	0.700	100	0.0493	2.22

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
5	30 JUN 78	17:00:00	40 24.4 N	72 18.7 W	55.0
SURFACE TEMPERATURE		NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
19.32		0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
49.8	520.	23.08	0.033	0.769	

S P E C I E S	RANK COUNTS %			NO. /M3	NO. /M2
OITHONA SIMILIS	1.0	425	40.13	552.44	27513.
CHAETOGNATH	2.0	175	16.53	227.47	11329.
PSEUDOCALANUS SPP. C	3.0	115	10.86	149.48	7445.
PSEUDOCALANUS MINUTUS AF	4.0	87	8.22	113.09	5632.
CALANUS SPP. C	5.0	80	7.55	103.99	5179.
TEMORA SPP. C	6.0	70	6.61	90.99	4532.
TEMORA LONGICORNIS AM	7.0	18	1.70	23.40	1165.
PARACALANUS PARVUS AF	8.5	14	1.32	18.20	906.
PARACALANUS SPP. C	8.5	14	1.32	18.20	906.
PARACALANUS PARVUS AM	10.5	13	1.23	16.90	842.
CENTROPAGES SPP. C	10.5	13	1.23	16.90	842.
PSEUDOCALANUS MINUTUS AM	12.0	9	0.85	11.70	583.
ACARTIA SPP. C	13.0	7	0.66	9.10	453.
CENTROPAGES TYPICUS AM	14.0	6	0.57	7.80	388.
CENTROPAGES TYPICUS AF	15.0	5	0.47	6.50	324.
CALANUS FINMARCHICUS A	16.5	3	0.28	3.90	194.
TEMORA LONGICORNIS AF	16.5	3	0.28	3.90	194.
ACARTIA TONSA AM	18.0	2	0.19	2.60	129.
TOTALS	18	1059	100	1376.54	68557.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.071	7.63	0.0031	0.15
505-1050	0.058	6.24	0.0025	0.13
1050 +	0.801	86.13	0.0347	1.73
TOTALS	0.930	100	0.0403	2.01

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
6	30 JUN 78	18:53:00	40 19.0 N	72 15.8 W	57.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	20.17	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
55.0	500.	22.19	0.025	0.555	

S P E C I E S	RANK	COUNTS	%	NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	320	26.91	576.79	31723.
TEMORA SPP. C	2.0	220	18.50	396.54	21810.
CALANUS SPP. C	3.0	158	13.29	284.79	15663.
OITHONA SIMILIS	4.0	130	10.93	234.32	12038.
PSEUDOCALANUS MINUTUS AF	5.0	113	9.50	203.68	11202.
CHAETOGNATH	6.0	85	7.15	153.21	8426.
CENTROPAGES SPP. C	7.0	34	2.86	61.28	3371.
CALANUS FINMARCHICUS A	8.0	27	2.27	48.67	2677.
PSEUDOCALANUS MINUTUS AM	9.0	26	2.19	45.86	2578.
TEMORA LONGICORNIS AM	10.0	19	1.60	34.25	1884.
PARACALANUS PARVUS AF	11.0	12	1.01	21.63	1190.
PARACALANUS SPP. C	12.0	11	0.93	19.83	1090.
CENTROPAGES TYPICUS AM	13.5	9	0.76	16.22	892.
TEMORA LONGICORNIS AF	13.5	9	0.76	16.22	892.
PARACALANUS PARVUS AM	15.0	8	0.67	14.42	793.
CENTROPAGES TYPICUS AF	16.5	3	0.25	5.41	297.
ACARTIA SPP. C	16.5	3	0.25	5.41	297.
ACARTIA TONSA AM	18.5	1	0.08	1.80	99.
ACARTIA TONSA AF	18.5	1	0.08	1.80	99.
TOTALS	19	1189	100	2143.12	117872.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.044	2.62	0.0020	0.11
505-1050	0.061	3.63	0.0027	0.15
1050 +	1.574	93.75	0.0709	3.90
TOTALS	1.679	100	0.0757	4.16

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
7	30 JUN 78	20:45:00	40 13.3 N	72 11.0 W	64.0

	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	20.08	0.2827	0.1570	223	

NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
62.0	520.	23.08	0.022	0.513	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C - - - - -	1.0	890	51.24	1735.30	107588.
OITHONA SIMILIS - - - - -	2.0	300	17.27	584.93	36266.
CALANUS SPP. C - - - - -	3.0	265	15.26	516.69	32035.
PSEUDOCALANUS MINUTUS AF - - - -	4.0	158	9.10	309.06	19100.
CHAETOGNATH - - - - -	5.0	68	3.91	132.58	8220.
PSEUDOCALANUS MINUTUS AM - - - -	6.0	12	0.69	23.40	1451.
TEMORA SPP. C - - - - -	7.0	10	0.58	19.50	1209.
CENTROPAGES SPP. C - - - - -	8.0	9	0.52	17.55	1088.
CALANUS FINMARCHICUS A - - - - -	9.0	8	0.46	15.60	967.
PARACALANUS SPP. C - - - - -	10.0	5	0.29	9.75	604.
CENTROPAGES TYPICUS AM - - - - -	13.0	2	0.12	3.90	242.
TEMORA LONGICORNIS AF - - - - -	13.0	2	0.12	3.90	242.
ACARTIA SPP. C - - - - -	13.0	2	0.12	3.90	242.
TEMORA LONGICORNIS AM - - - - -	13.0	2	0.12	3.90	242.
PARACALANUS PARVUS AF - - - - -	13.0	2	0.12	3.90	242.
ACARTIA TONSA AM - - - - -	16.5	1	0.06	1.95	121.
ACARTIA TONSA AF - - - - -	16.5	1	0.06	1.95	121.

TOTALS	17	1737	100	3386.75	209979.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.035	1.22	0.0015	0.09
505-1050 - - - - -	0.079	2.75	0.0034	0.21
1050 + - - - - -	2.754	96.03	0.1193	7.40

TOTALS	2.868	100	0.1243	7.70

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
8	30 JUN 78	22:28:00	40 7.6 N	72 7.0 W	68.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	20.30	0.2877	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
65.0	520.	23.49	0.020	0.470	

SPECIES	RANK	COUNTS	%	NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	1130	50.67	2405.50	156358.
PSEUDOCALANUS MINUTUS AF	2.0	315	14.13	670.56	43586.
OITHONA SIMILIS	3.0	180	8.07	383.18	24907.
CALANUS SPP. C	4.0	132	5.92	281.00	18265.
PARACALANUS PARVUS AF	5.0	93	4.17	197.97	12868.
TEMORA SPP. C	6.0	57	2.56	121.34	7887.
CENTROPAGES TYPICUS AM	7.5	49	2.20	104.31	6780.
CENTROPAGES TYPICUS AF	7.5	49	2.20	104.31	6780.
PARACALANUS SPP. C	9.0	48	2.15	102.18	6642.
CENTROPAGES SPP. C	10.0	44	1.97	93.67	6088.
PSEUDOCALANUS MINUTUS AM	11.0	34	1.52	72.38	4705.
CHAETOGNATH	12.0	32	1.43	68.12	4428.
TEMORA LONGICORNIS AF	13.0	24	1.08	51.09	3321.
TEMORA LONGICORNIS AM	14.0	18	0.81	38.32	2491.
CALANUS FINMARCHICUS A	15.0	13	0.58	27.67	1799.
PARACALANUS PARVUS AM	16.0	12	0.54	25.55	1660.
TOTALS	16	2230	100	4747.14	308564.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.113	4.71	0.0048	0.31
505-1050	0.125	5.21	0.0053	0.35
1050 +	2.159	90.07	0.0919	5.97
TOTALS	2.397	100	0.1021	6.63

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
9	1 JUL 78	00:15:00	40 2.0 N	72 6.2 W	73.0
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	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	20.41	0.2827	0.1570	223	
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NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
52.3	760.	33.73	0.011	0.355	
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SPECIES	RANK	COUNTS	%	NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	690	40.33	1943.27	101684.
PSEUDOCALANUS MINUTUS AF	2.0	370	21.62	1042.04	54526.
OITHONA SIMILIS	3.0	192	11.22	540.74	28295.
CALANUS SPP. C	4.0	135	7.89	380.21	19895.
CENTROPAGES SPP. C	5.0	97	5.67	273.18	14295.
PSEUDOCALANUS MINUTUS AM	6.5	40	2.34	112.65	5895.
PARACALANUS SPP. C	6.5	40	2.34	112.65	5895.
CHAETOGNATH	8.0	36	2.10	101.39	5305.
CENTROPAGES TYPICUS AM	9.0	28	1.64	78.86	4126.
CENTROPAGES TYPICUS AF	10.0	26	1.52	73.22	3832.
PARACALANUS PARVUS AF	11.0	22	1.29	61.96	3242.
CALANUS FINMARCHICUS A	12.0	21	1.23	59.14	3095.
PARACALANUS PARVUS AM	13.0	11	0.64	30.98	1621.
TEMORA SPP. C	14.0	2	0.12	5.63	295.
ACARTIA SPP. C	15.0	1	0.06	2.82	147.
TOTALS	15	1711	100	4818.75	252147.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.133	4.65	0.0039	0.21
505-1050	0.054	1.89	0.0016	0.08
1050 +	2.672	93.46	0.0792	4.14
TOTALS	2.859	100	0.0848	4.43

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
10	1 JUL 78	02:20:00	39 56.0 N	72 3.5 W	82.0
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	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	19.92	0.2827	0.1570	223	
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NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
69.3	760.	33.73	0.010	0.337	

SPECIES	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	365	26.51	1082.07	74968.
PSEUDOCALANUS MINUTUS AF	2.5	265	19.24	785.61	54429.
OITHONA SIMILIS	2.5	265	19.24	785.61	54429.
CALANUS SPP. C	4.0	218	15.83	646.28	44775.
CENTROPAGES SPP. C	5.0	123	8.93	364.64	25263.
PSEUDOCALANUS MINUTUS AM	6.0	43	3.12	127.48	8832.
CENTROPAGES TYPICUS AF	7.5	21	1.53	62.26	4313.
CENTROPAGES TYPICUS AM	7.5	21	1.53	62.26	4313.
PARACALANUS SPP. C	9.0	18	1.31	53.36	3697.
PARACALANUS PARVUS AF	10.0	15	1.09	44.47	3081.
CHAETOGNATH	11.0	12	0.87	35.57	2465.
CALANUS FINMARCHICUS A	12.0	6	0.44	17.79	1232.
PARACALANUS PARVUS AM	13.0	3	0.22	8.89	616.
TEMORA SPP. C	14.0	2	0.15	5.93	411.
TOTALS	14	1377	100	4082.21	282824.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.141	2.42	0.0042	0.29
505-1050	0.048	0.82	0.0014	0.10
1050 +	5.644	96.76	0.1673	11.59
TOTALS	5.833	100	0.1729	11.98

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
11	1 JUL 78	04:40:00	39 50.2 N	72 0.0 W	113.0
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	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	19.58	0.2827	0.1570	223	
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NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	1110.	49.27	0.020	0.985	

SPECIES	RANK	COUNTS	%	NO./M3	NO./M2
PSEUDOCALANUS MINUTUS AF	1.0	450	27.12	456.70	45670.
PSEUDOCALANUS SPP. C	2.0	335	20.19	339.99	33999.
CALANUS SPP. C	3.0	295	17.78	299.39	29939.
OITHONA SIMILIS	4.0	215	12.96	218.20	21820.
CENTROPAGES SPP. C	5.0	158	9.52	160.35	16035.
PSEUDOCALANUS MINUTUS AM	6.0	57	3.44	57.85	5785.
CENTROPAGES TYPICUS AM	7.0	46	2.77	46.69	4669.
CHAETOGNATH	8.0	42	2.53	42.63	4263.
CENTROPAGES TYPICUS AF	9.0	21	1.27	21.31	2131.
PARACALANUS SPP. C	10.0	17	1.02	17.25	1725.
PARACALANUS PARVUS AF	11.0	15	0.90	15.22	1522.
CALANUS FINMARCHICUS A	12.0	5	0.30	5.07	507.
ACARTIA SPP. C	13.0	2	0.12	2.03	203.
PARACALANUS PARVUS AM	14.0	1	0.06	1.01	101.
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TOTALS	14	1659	100	1683.71	168371.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.072	1.97	0.0015	0.15
505-1050	0.048	1.31	0.0010	0.10
1050 +	3.533	96.72	0.0717	7.17
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TOTALS	3.653	100	0.0741	7.41

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
12	1 JUL 78	09:03:00	39 44.4 N	71 57.0 W	172.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	19.69	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	1140.	50.60	0.100	5.060	

SPECIES	RANK COUNTS %			NO./M3	NO./M2
PARACALANUS PARVUS AF	1.0	235	19.15	46.44	4644.
CENTROPAGES SPP. C	2.0	173	14.51	35.18	3518.
CENTROPAGES TYPICUS AM	3.0	133	10.84	26.29	2629.
PSEUDOCALANUS SPP. C	4.0	120	9.78	23.72	2372.
PARACALANUS SPP. C	5.0	113	9.21	22.33	2233.
CENTROPAGES TYPICUS AF	6.0	98	7.99	19.37	1937.
CALANUS SPP. C	7.0	74	6.03	14.63	1463.
PSEUDOCALANUS MINUTUS AF	8.0	69	5.62	13.64	1364.
CHAETOGNATH	9.0	49	3.99	9.68	968.
DOLIOLID	10.0	47	3.83	9.29	929.
OITHONA SIMILIS	11.0	41	3.34	8.10	810.
ACARTIA DANAE AF	12.0	21	1.71	4.15	415.
ACARTIA SPP. C	13.0	20	1.63	3.95	395.
PARACALANUS PARVUS AM	14.5	10	0.81	1.98	198.
CALANUS FINMARCHICUS A	14.5	10	0.81	1.98	198.
PSEUDOCALANUS MINUTUS AM	16.0	6	0.49	1.19	119.
ACARTIA DANAE AM	17.0	3	0.24	0.59	59.
TOTALS	17	1227	100	242.50	24250.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.058	10.96	0.0011	0.11
505-1050	0.068	12.85	0.0013	0.13
1050 +	0.403	76.18	0.0080	0.80
TOTALS	0.529	100	0.0105	1.05

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
13	1 JUL 78	11:16:00	39 38.5 N	71 54.0 W	702.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	19.60	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	1250.	55.48	0.133	7.397	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2	
PSEUDOCALANUS MINUTUS AF	- - - -	1.0	320	20.86	43.26	4326
PSEUDOCALANUS SPP. C	- - - - -	2.0	235	18.58	38.53	3853.
CENTROPAGES TYPICUS AM	- - - - -	3.0	145	9.45	19.60	1960.
CENTROPAGES SPP. C	- - - - -	4.0	128	8.34	17.30	1730.
CALANUS SPP. C	- - - - -	5.0	117	7.63	15.82	1582.
CENTROPAGES TYPICUS AF	- - - - -	6.0	102	6.65	13.79	1379.
CHAETOGNATH	- - - - -	7.0	93	6.06	12.57	1257.
PARACALANUS PARVUS AF	- - - - -	8.0	83	5.41	11.22	1122.
PARACALANUS SPP. C	- - - - -	9.0	70	4.56	9.46	946.
ACARTIA DANAE AF	- - - - -	10.0	59	3.85	7.98	798.
OITHONA SIMILIS	- - - - -	11.0	50	3.26	6.76	676.
PSEUDOCALANUS MINUTUS AM	- - - -	12.0	25	1.63	3.38	338.
CALANUS FINMARCHICUS A	- - - - -	13.0	22	1.43	2.97	297.
PARACALANUS PARVUS AM	- - - - -	14.5	16	1.04	2.16	216.
ACARTIA SPP. C	- - - - -	14.5	16	1.04	2.16	216.
ACARTIA LONGIREMIS AF	- - - - -	16.0	2	0.13	0.27	27.
ACARTIA DANAE AM	- - - - -	17.0	1	0.07	0.14	14.
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TOTALS		17	1534	100	207.37	20737.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.013	2.21	0.0002	0.02
505-1050 - - - - -	0.039	6.64	0.0007	0.07
1050 + - - - - -	0.535	91.14	0.0096	0.96
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TOTALS	0.587	100	0.0106	1.06

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
14	1 JUL 78	14:30:00	39 33.6 N	71 50.5 W	915.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	20.50	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	880.	39.06	0.167	6.510	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS MINUTUS AF	1.0	305	21.34	46.85	4685.
CENTROPAGES SPP. C	2.0	265	18.54	40.71	4071.
PSEUDOCALANUS SPP. C	3.0	190	13.30	29.19	2919.
PARACALANUS PARVUS AF	4.0	162	11.34	24.89	2489.
CALANUS SPP. C	5.0	135	9.45	20.74	2074.
OITHONA SIMILIS	6.0	60	4.20	9.22	922.
CHAETOGNATH	7.0	59	4.13	9.06	906.
PARACALANUS SPP. C	8.0	55	3.85	8.45	845.
CENTROPAGES TYPICUS AF	9.0	47	3.29	7.22	722.
CENTROPAGES TYPICUS AM	10.0	43	3.01	6.61	661.
CALANUS FINMARCHICUS A	11.0	26	1.82	3.99	399.
PSEUDOCALANUS MINUTUS AM	12.5	22	1.54	3.38	338.
ACARTIA DANAE AF	12.5	22	1.54	3.38	338.
ACARTIA SPP. C	14.0	19	1.33	2.92	292.
PARACALANUS PARVUS AM	15.0	17	1.19	2.61	261.
ACARTIA LONGIREMIS AF	16.5	1	0.07	0.15	15.
ACARTIA LONGIREMIS AM	16.5	1	0.07	0.15	15.
TOTALS	17	1429	100	219.52	21952.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.036	6.96	0.0009	0.09
505-1050	0.055	10.64	0.0014	0.14
1050 +	0.426	82.40	0.0109	1.09
TOTALS	0.517	100	0.0132	1.32

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
15	2 JUL 78	07:57:00	40 14.1 N	68 46.1 W	134.0

	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	15.21	0.2827	0.1570	223	

NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	1930.	85.66	0.086	7.342	

S P E C I E S	RANK COUNTS %			NO. /M3	NO. /M2
OITHONA SIMILIS	1.0	410	28.73	55.84	5584.
PSEUDOCALANUS SPP. C	2.0	360	25.23	49.03	4903.
CALANUS SPP. C	3.0	280	19.62	38.13	3813.
PSEUDOCALANUS MINUTUS AF	4.0	128	8.97	17.43	1743.
CENTROPAGES SPP. C	5.0	69	4.84	9.40	940.
CHAETOGNATH	6.0	46	3.22	6.27	627.
PSEUDOCALANUS MINUTUS AM	7.0	33	2.31	4.49	449.
CALANUS FINMARCHICUS A	8.0	32	2.24	4.36	436.
PARACALANUS SPP. C	9.0	27	1.89	3.68	368.
CENTROPAGES TYPICUS AF	10.0	15	1.05	2.04	204.
CENTROPAGES TYPICUS AM	11.0	11	0.77	1.50	150.
PARACALANUS PARVUS AF	12.0	9	0.63	1.23	123.
TEMORA SPP. C	13.0	4	0.28	0.54	54.
PARACALANUS PARVUS AM	14.0	2	0.14	0.27	27.
ACARTIA SPP. C	15.0	1	0.07	0.14	14.
TOTALS	15	1427	100	194.35	19435.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.037	6.67	0.0004	0.04
505-1050	0.031	5.59	0.0004	0.04
1050 +	0.487	87.75	0.0057	0.57
TOTALS	0.555	100	0.0065	0.65

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
16	2 JUL 78	16:20:00	40 21.7 N	67 25.2 W	439.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	22.56	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	740.	32.84	0.086	2.815	

SPECIES	RANK COUNTS %			NO./M3	NO./M2
OITHONA SIMILIS	1.0	530	43.37	188.26	18926.
CALANUS FINMARCHICUS A	2.0	250	20.46	88.80	8880.
PSEUDOCALANUS SPP. C	3.0	140	11.46	49.73	4973.
CHAETOGNATH	4.0	107	8.76	38.01	3801.
PSEUDOCALANUS MINUTUS AF	5.0	54	4.42	19.18	1918.
PARACALANUS SPP. C	6.0	47	3.85	16.70	1670.
PARACALANUS PARVUS AF	7.0	27	2.21	9.59	959.
ACARTIA SPP. C	8.0	15	1.23	5.33	533.
PSEUDOCALANUS MINUTUS AM	9.0	14	1.15	4.97	497.
CENTROPAGES SPP. C	10.0	12	0.98	4.26	426.
ACARTIA DANAE AF	11.5	10	0.82	3.55	355.
PARACALANUS PARVUS AM	11.5	10	0.82	3.55	355.
CENTROPAGES TYPICUS AM	13.0	4	0.33	1.42	142.
ACARTIA DANAE AM	14.0	2	0.16	0.71	71.
TOTALS	14	1222	100	434.07	43407.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.045	6.30	0.0014	0.14
505-1050	0.034	4.76	0.0010	0.10
1050 +	0.635	88.94	0.0193	1.93
TOTALS	0.714	100	0.0217	2.17

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
17	2 JUL 78	18:28:00	40 27.4 N	67 31.7 W	136.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	18.34	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	1090.	48.38	0.067	3.225	

S P E C I E S	RANK COUNTS %			NO. /M3	NO. /M2
OITHONA SIMILIS	1.0	310	27.19	96.12	9612.
CENTROPAGES SPP. C	2.0	190	16.67	58.91	5891.
PSEUDOCALANUS SPP. C	3.0	158	13.86	48.99	4899.
CALANUS SPP. C	4.0	150	13.16	46.51	4651.
PARACALANUS PARVUS AF	5.0	62	5.53	19.53	1953.
CHAETOGNATH	6.0	62	5.44	19.22	1922.
PSEUDOCALANUS MINUTUS AF	7.0	61	5.35	18.91	1891.
PARACALANUS SPP. C	8.0	41	3.60	12.71	1271.
ACARTIA SPP. C	9.0	25	2.19	7.75	775.
ACARTIA DANAE AF	10.0	21	1.84	6.51	651.
CALANUS FINMARCHICUS A	11.0	20	1.75	6.20	620.
PSEUDOCALANUS MINUTUS AM	12.0	17	1.49	5.27	527.
PARACALANUS PARVUS AM	13.0	7	0.61	2.17	217.
CENTROPAGES TYPICUS AM	14.0	6	0.53	1.86	186.
CENTROPAGES TYPICUS AF	15.0	5	0.44	1.55	155.
ACARTIA LONGIREMIS AF	16.0	3	0.26	0.93	93.
ACARTIA DANAE AM	17.0	1	0.09	0.31	31.
TOTALS	17	1140	100	353.46	35346.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.035	5.18	0.0007	0.07
505-1050	0.047	6.95	0.0010	0.10
1050 +	0.594	87.87	0.0123	1.23
TOTALS	0.676	100	0.0140	1.40

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
18	2 JUL 78	21:03:00	40 34.0 N	67 37.6 W	113.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.76	0.2877	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	840.	37.94	0.050	1.897	

S P E C I E S	RANK	COUNTS	%	NO./M3	NO./M2
CALANUS SPP. C	1.0	595	39.91	313.64	31364.
OITHONA SIMILIS	2.0	340	22.80	179.22	17922.
PSEUDOCALANUS SPP. C	3.0	265	17.77	139.69	13969.
PSEUDOCALANUS MINUTUS AF	4.0	138	9.26	72.74	7274.
CHAETOGNATH	5.0	75	5.03	39.53	3953.
CALANUS FINMARCHICUS A	6.0	32	2.15	16.87	1687.
PSEUDOCALANUS MINUTUS AM	7.0	20	1.34	10.54	1054.
PARACALANUS PARVUS AF	8.0	11	0.74	5.80	580.
PARACALANUS SPP. C	9.0	6	0.40	3.16	316.
TEMORA SPP. C	10.0	4	0.27	2.11	211.
PARACALANUS PARVUS AM	11.0	3	0.20	1.58	158.
CENTROPAGES TYPICUS AM	12.0	2	0.13	1.05	105.
TOTALS	12	1491	100	785.94	78594.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.061	3.36	0.0016	0.16
505-1050	0.076	4.18	0.0020	0.20
1050 +	1.680	92.46	0.0443	4.43
TOTALS	1.817	100	0.0479	4.79

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
19	2 JUL 78	23:23:00	40 40.5 N	67 44.0 W	75.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.85	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
69.0	515.	22.86	0.057	1.306	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
CHAETOGNATH	1.0	620	29.05	474.68	32753.
CALANUS SPP. C	2.0	590	27.65	451.71	31168.
PSEUDOCALANUS SPP. C	3.0	410	19.21	313.90	21659.
OITHONA SIMILIS	4.0	230	10.78	176.09	12150.
PSEUDOCALANUS MINUTUS AF	5.0	155	7.26	118.67	8188.
CALANUS FINMARCHICUS A	6.0	93	4.36	71.20	4913.
PSEUDOCALANUS MINUTUS AM	7.0	33	1.55	25.26	1743.
TEMORA SPP. C	8.0	3	0.14	2.30	158.
TOTALS	8	2134	100	1633.80	112732.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.173	12.55	0.0076	0.52
505-1050	0.135	9.80	0.0059	0.41
1050 +	1.070	77.65	0.0468	3.23
TOTALS	1.378	100	0.0603	4.16

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
20	3 JUL 78	01:55:00	40 46.8 N	67 50.0 W	62.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.56	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
60.0	415.	18.42	0.033	0.614	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
CHAETOGNATH - - - - -	1.0	560	46.86	912.09	54725.
PSEUDOCALANUS SPP. C - - - - -	2.0	300	25.10	488.62	29317.
PSEUDOCALANUS MINUTUS AF - - - - -	3.0	132	11.05	214.99	12900.
CALANUS SPP. C - - - - -	4.0	105	8.79	171.02	10261.
OITHONA SIMILIS - - - - -	5.5	38	3.18	61.89	3713.
CALANUS FINMARCHICUS A - - - - -	5.5	38	3.18	61.89	3713.
PSEUDOCALANUS MINUTUS AM - - - - -	7.0	18	1.51	29.32	1759.
PARACALANUS SPP. C - - - - -	8.0	2	0.17	3.26	195.
CENTROPAGES SPP. C - - - - -	9.5	1	0.08	1.63	98.
ACARTIA SPP. C - - - - -	9.5	1	0.08	1.63	98.
TOTALS	10	1195	100	1946.33	116780.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.141	10.20	0.0077	0.46
505-1050 - - - - -	0.084	6.07	0.0046	0.27
1050 + - - - - -	1.158	83.73	0.0629	3.77
TOTALS	1.383	100	0.0751	4.51

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
21	3 JUL 78	04:10:00	40 53.2 N	67 56.0 W	58.0

SURFACE TEMPERATURE		NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
12.09		0.2827	0.1570	223	

NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
56.0	400.	17.75	0.040	0.710	

S P E C I E S	RANK COUNTS %			NO. /M3	NO. /M2
CHAETOGNATH	1.0	735	51.83	1035.00	57960.
POLYCHAETE	2.0	385	27.15	542.14	30360.
PSEUDOCALANUS SPP. C	3.0	117	8.25	164.76	9226.
PSEUDOCALANUS MINUTUS AF	4.0	105	7.40	147.86	8280.
OITHONA SIMILIS	5.0	42	2.96	59.14	3312.
PSEUDOCALANUS MINUTUS AM	6.0	22	1.55	30.98	1735.
CALANUS FINMARCHICUS A	7.5	6	0.42	8.45	473.
CALANUS SPP. C	7.5	6	0.42	8.45	473.

TOTALS	8	1418	100	1996.78	111820.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.384	50.39	0.0216	1.21
505-1050	0.125	16.40	0.0070	0.39
1050 +	0.253	33.20	0.0143	0.80

TOTALS	0.762	100	0.0429	2.40

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
22	3 JUL 78	06:06:00	40 59.6 N	68 1.9 W	44.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	10.87	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
42.0	390.	17.31	0.080	1.385	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
OITHONA SIMILIS	1.0	745	48.95	537.99	22596.
POLYCHAETE	2.0	465	30.55	335.79	14103.
PSEUDOCALANUS MINUTUS AF	3.0	242	15.90	174.76	7340.
PSEUDOCALANUS SPP. C	4.0	50	3.29	36.11	1516.
PSEUDOCALANUS MINUTUS AM	5.0	17	1.12	12.28	516.
CALANUS SPP. C	6.0	2	0.13	1.44	61.
CALANUS FINMARCHICUS A	7.0	1	0.07	0.72	30.
TOTALS	7	1522	100	1099.09	46162.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.227	41.73	0.0131	0.55
505-1050	0.073	14.34	0.0045	0.19
1050 +	0.239	43.93	0.0138	0.58
TOTALS	0.544	100	0.0314	1.32

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
23	3 JUL 78	08:45:00	41 6.2 N	68 8.3 W	40.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	11.69	0.2927	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
38.0	240.	10.65	0.114	1.217	

S P E C I E S	RANK	COUNTS	%	NO./M3	NO./M2
CHAETOGNATH	1.0	1195	80.04	981.61	37301.
PSEUDOCALANUS MINUTUS AF	2.0	260	17.41	213.57	8116.
PSEUDOCALANUS SPP. C	3.0	21	1.41	17.25	656.
PSEUDOCALANUS MINUTUS AM	4.0	8	0.54	6.57	250.
CALANUS FINMARCHICUS A	5.0	6	0.40	4.93	187.
CALANUS SPP. C	6.0	3	0.20	2.46	94.
TOTALS	6	1493	100	1226.40	46603.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.225	31.73	0.0211	0.80
505-1050	0.040	5.64	0.0038	0.14
1050 +	0.444	62.62	0.0417	1.58
TOTALS	0.709	100	0.0666	2.53

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
24	3 JUL 78	11:44:00	41 12.7 N	69 14.3 W	48.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.54	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
44.0	250.	11.10	0.033	0.370	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
POLYCHAETE - - - - -	1.0	1120	65.73	3028.13	133238.
OITHONA SIMILIS - - - - -	2.0	510	29.93	1378.88	60671.
PSEUDOCALANUS MINUTUS AF - - - - -	3.0	68	3.99	183.85	8089.
PSEUDOCALANUS SPP. C - - - - -	4.0	3	0.18	8.11	357.
PSEUDOCALANUS MINUTUS AM - - - - -	5.0	2	0.12	5.41	238.
CALANUS SPP. C - - - - -	6.0	1	0.06	2.70	119.
	TOTALS			4607.08	202711.

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
25	3 JUL 78	13:15:00	41 19.0 N	68 20.7 W	53.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.86	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
51.0	340.	15.09	0.025	0.377	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
POLYCHAETE - - - - -	1.0	775	69.63	2054.27	104768.
CHAETOGNATH - - - - -	2.0	270	24.26	715.68	36500.
PSEUDOCALANUS MINUTUS AF - - - - -	3.0	62	5.57	164.34	8381.
OITHONA SIMILIS - - - - -	5.0	2	0.18	5.30	270.
CALANUS FINMARCHICUS A - - - - -	5.0	2	0.18	5.30	270.
PSEUDOCALANUS SPP. C - - - - -	5.0	2	0.18	5.30	270.
TOTALS	6	1113	100	2950.20	150460.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.211	12.91	0.0140	0.71
505-1050 - - - - -	0.089	5.45	0.0059	0.30
1050 + - - - - -	1.334	81.64	0.0884	4.51
TOTALS	1.634	100	0.1083	5.52

- DATA NOT TAKEN

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
26	3 JUL 78	15:40:00	41 25.8 N	68 27.2 W	71.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.43	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
69.0	475.	21.08	0.120	2.530	

SPECIES	RANK	COUNTS	%	NO./M3	NO./M2
PSEUDOCALANUS MINUTUS AF	1.0	520	46.43	205.54	14182.
PSEUDOCALANUS SPP. C	2.0	440	39.29	173.92	12001.
PSEUDOCALANUS MINUTUS AM	3.0	108	9.64	42.69	2946.
OITHONA SIMILIS	4.0	25	2.23	9.88	682.
CALANUS SPP. C	5.0	11	0.98	4.35	300.
CHAETOGNATH	6.0	6	0.54	2.37	164.
CALANUS FINMARCHICUS A	7.0	5	0.45	1.98	136.
ACARTIA SPP. C	8.0	4	0.36	1.58	109.
ACARTIA LONGIREMIS AM	9.0	1	0.09	0.40	27.
TOTALS	9	1120	100	442.71	30547.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.112	19.18	0.0053	0.37
505-1050	0.308	52.74	0.0146	1.01
1050 +	0.164	28.08	0.0078	0.54
TOTALS	0.584	100	0.0277	1.91

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
27	3 JUL 78	18:02:00	41 32.1 N	68 33.4 W	104.0
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	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	13.87	0.2827	0.1570	223	
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NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	899.	30.62	0.400	12.250	

SPECIES	RANK	COUNTS	%	NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	455	32.78	37.14	3714.
CALANUS SPP. C	2.0	450	32.42	36.73	3673.
PSEUDOCALANUS MINUTUS AF	3.0	310	22.33	25.31	2531.
OITHONA SIMILIS	4.0	81	5.84	6.61	661.
PSEUDOCALANUS MINUTUS AM	5.0	54	3.89	4.41	441.
CALANUS FINMARCHICUS A	6.0	22	1.59	1.80	180.
CHAETOGNATH	7.0	11	0.79	0.90	90.
ACARTIA LONGIREMIS AM	8.0	4	0.29	0.33	33.
ACARTIA SPP. C	9.0	1	0.07	0.08	8.
TOTALS	9	1383	100	113.31	11331.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT	%	GM/M3	GM/M2
223-505	0.028	12.90	0.0009	0.09
503-1050	0.050	23.04	0.0016	0.16
1050 +	0.139	64.06	0.0045	0.45
TOTALS	0.217	100	0.0071	0.71

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
28	3 JUL 78	20:18:00	41 38.6 N	68 39.7 W	150.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	16.53	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
100.0	960.	42.61	0.150	6.391	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
CALANUS SPP. C - - - - -	1.0	575	46.30	89.97	8997.
CALANUS FINMARCHICUS A - - - - -	2.0	315	25.36	49.29	4929.
OITHONA SIMILIS - - - - -	3.0	138	11.11	21.59	2159.
PSEUDOCALANUS MINUTUS AF - - - - -	4.0	69	5.56	10.80	1080.
CENTROPAGES TYPICUS AM - - - - -	5.0	50	4.03	7.82	782.
CENTROPAGES TYPICUS AF - - - - -	6.0	36	2.90	5.63	563.
CENTROPAGES SPP. C - - - - -	7.0	30	2.42	4.69	469.
PSEUDOCALANUS SPP. C - - - - -	8.0	12	0.97	1.88	188.
TEMORA LONGICORNIS AM - - - - -	9.0	8	0.64	1.25	125.
ACARTIA DANAE AM - - - - -	10.0	6	0.48	0.94	94.
PSEUDOCALANUS MINUTUS AM - - - - -	11.0	2	0.16	0.31	31.
ACARTIA LONGIREMIS AF - - - - -	12.0	1	0.08	0.16	16.
TOTALS	12	1242	100	194.33	19433.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.006	0.42	0.0001	0.01
505-1050 - - - - -	0.030	2.08	0.0007	0.07
1050 + - - - - -	1.407	97.51	0.0330	3.30
TOTALS	1.443	100	0.0339	3.39

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
29	3 JUL 78	22:26:00	41 45.0 N	68 46.0 W	176.0

	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	15.78	0.2827	0.1570	223	

NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
75.6	1060.	47.05	0.100	4.705	

S P E C I E S	RANK COUNTS %			NO. /M3	NO. /M2
CALANUS SPP. C	1.0	735	44.04	156.23	11968.
CALANUS FINMARCHICUS A	2.0	330	19.77	70.14	5373.
PSEUDOCALANUS MINUTUS AF	3.0	290	17.38	61.64	4722.
OITHONA SIMILIS	4.0	103	6.17	21.89	1677.
PSEUDOCALANUS SPP. C	5.0	67	4.01	14.24	1091.
CENTROPAGES TYPICUS AF	6.0	37	2.22	7.86	602.
CENTROPAGES SPP. C	7.5	35	2.10	7.44	570.
CENTROPAGES TYPICUS AM	7.5	35	2.10	7.44	570.
PSEUDOCALANUS MINUTUS AM	9.0	22	1.32	4.68	358.
ACARTIA LONGIREMIS AM	10.0	6	0.36	1.28	98.
ACARTIA SPP. C	11.5	4	0.24	0.85	65.
ACARTIA LONGIREMIS AF	11.5	4	0.24	0.85	65.
CHAETOGNATH	13.0	1	0.06	0.21	16.

TOTALS	13	1669	100	354.75	27176.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.012	0.30	0.0003	0.02
505-1050	0.069	1.73	0.0015	0.11
1050 +	3.909	97.97	0.0831	6.36

TOTALS	3.990	100	0.0848	6.50

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
30	4 JUL 78	07:15:00	40 51.5 N	67 55.8 W	58.0
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	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	11.65	0.2827	0.1570	223	
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NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
54.0	1760.	78.12	0.033	2.604	
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S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
CHAETOGNATH - - - - -	1.0	470	41.89	180.50	9747.
PSEUDOCALANUS SPP. C - - - - -	2.0	160	14.26	61.45	3318.
OITHONA SIMILIS - - - - -	3.0	145	12.92	55.69	3007.
CALANUS FINMARCHICUS A - - - - -	4.0	140	12.48	53.77	2903.
CALANUS SPP. C - - - - -	5.0	102	9.09	39.17	2115.
PSEUDOCALANUS MINUTUS AF - - - - -	6.0	79	7.04	30.34	1638.
PSEUDOCALANUS MINUTUS AM - - - - -	7.0	17	1.52	6.53	353.
ACARTIA LONGIREMIS AM - - - - -	8.5	3	0.27	1.15	62.
ACARTIA SPP. C - - - - -	8.5	3	0.27	1.15	62.
ACARTIA LONGIREMIS AF - - - - -	10.0	2	0.18	0.77	41.
TEMORA LONGICORNIS AF - - - - -	11.0	1	0.09	0.38	21.
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TOTALS	11	1122	100	430.90	23269.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.043	3.95	0.0006	0.03
505-1050 - - - - -	0.084	7.71	0.0011	0.06
1050 + - - - - -	0.962	88.34	0.0123	0.67
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TOTALS	1.089	100	0.0139	0.75

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
34	5 JUL 78	21:24:00	40 34.0 N	69 41.0 W	63.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	12.41	0.2827	0.0273	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
58.0	5388.	41.58	0.025	1.040	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
CALANUS SPP. C - - - - -	1.5	475	28.81	456.92	26501.
PSEUDOCALANUS SPP. C - - - - -	1.5	475	28.81	456.92	26501.
PSEUDOCALANUS MINUTUS AF - - - - -	3.5	165	10.01	158.72	9206.
OITHONA SIMILIS - - - - -	3.5	165	10.01	158.72	9206.
CENTROPAGES SPP. C - - - - -	5.0	125	7.58	120.24	6974.
CHAETOGNATH - - - - -	6.0	95	5.76	91.38	5300.
PSEUDOCALANUS MINUTUS AM - - - - -	7.0	43	2.61	41.36	2399.
PARACALANUS SPP. C - - - - -	8.0	30	1.82	28.86	1674.
CENTROPAGES TYPICUS AM - - - - -	9.0	24	1.46	23.09	1339.
CALANUS FINMARCHICUS A - - - - -	10.0	23	1.39	22.12	1283.
PARACALANUS PARVUS AF - - - - -	11.0	15	0.91	14.43	837.
CENTROPAGES TYPICUS AF - - - - -	12.0	11	0.67	10.58	614.
PARACALANUS PARVUS AM - - - - -	13.0	2	0.12	1.92	112.
ACARTIA SPP. C - - - - -	14.0	1	0.06	0.96	56.
TOTALS	14	1649	100	1586.22	92001.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505 - - - - -	0.097	4.79	0.0023	0.14
505-1050 - - - - -	0.071	3.50	0.0017	0.10
1050 + - - - - -	1.858	91.71	0.0447	2.59
TOTALS	2.026	100	0.0487	2.83

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
36	6 JUL 78	02:30:00	40 34.3 N	70 19.2 W	62.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	15.04	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
30.0	545.	24.19	0.044	1.075	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	595	33.65	553.45	16604.
CALANUS SPP. C	2.0	350	19.80	325.56	9767.
PSEUDOCALANUS MINUTUS AF	3.0	335	18.95	311.61	9348.
OITHONA SIMILIS	4.0	190	10.75	176.73	5302.
PSEUDOCALANUS MINUTUS AM	5.0	70	3.96	65.11	1953.
CHAETOGNATH	6.0	55	3.11	51.16	1535.
CALANUS FINMARCHICUS A	7.0	50	2.83	46.51	1395.
PARACALANUS SPP. C	8.0	39	2.21	36.28	1088.
PARACALANUS PARVUS AF	9.0	28	1.58	26.04	781.
CENTROPAGES TYPICUS AF	10.0	13	0.74	12.09	363.
CENTROPAGES TYPICUS AM	11.5	12	0.68	11.16	335.
CENTROPAGES SPP. C	11.5	12	0.68	11.16	335.
PARACALANUS PARVUS AM	13.0	8	0.45	7.44	223.
ACARTIA SPP. C	15.0	3	0.17	2.79	84.
TEMORA SPP. C	15.0	3	0.17	2.79	84.
ACARTIA DANAE AF	15.0	3	0.17	2.79	84.
TEMORA LONGICORNIS AM	17.5	1	0.06	0.93	28.
ACARTIA LONGIREMIS AF	17.5	1	0.06	0.93	28.
TOTALS	18	1768	100	1644.53	49336.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.052	1.82	0.0021	0.06
505-1050	0.047	1.65	0.0019	0.06
1050 +	2.755	96.53	0.1139	3.42
TOTALS	2.854	100	0.1180	3.54

ATLANTIC COASTAL EXPERIMENT - 4 ZOOPLANKTON NET REPORT 02-APR-82 11:24

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
38	6 JUL 78	07:28:00	40 36.8 N	71 21.7 W	65.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	13.89	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
58.0	598.	26.54	0.022	0.590	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	730	38.73	1237.68	71785.
PSEUDOCALANUS MINUTUS AF	2.0	435	23.08	737.52	42776.
CALANUS SPP. C	3.0	250	13.26	423.86	24584.
OITHONA SIMILIS	4.0	135	7.16	228.89	13275.
CENTROPAGES SPP. C	5.0	125	6.63	211.93	12292.
CHAETOGNATH	6.0	55	2.92	93.25	5408.
PARACALANUS SPP. C	7.0	54	2.86	91.55	5310.
PSEUDOCALANUS MINUTUS AM	8.0	39	2.07	66.12	3835.
CALANUS FINMARCHICUS A	9.0	16	0.85	27.13	1573.
PARACALANUS PARVUS AF	10.0	15	0.80	25.43	1475.
CENTROPAGES TYPICUS AM	11.0	11	0.58	18.65	1082.
CENTROPAGES TYPICUS AF	12.0	8	0.42	13.56	787.
PARACALANUS PARVUS AM	13.0	5	0.27	8.48	492.
ACARTIA SPP. C	15.0	2	0.11	3.39	197.
TEMORA SPP. C	15.0	2	0.11	3.39	197.
TEMORA LONGICORNIS AM	15.0	2	0.11	3.39	197.
ACARTIA LONGIREMIS AM	17.0	1	0.05	1.70	98.
TOTALS	17	1885	100	3195.93	185364.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.130	4.62	0.0049	0.28
505-1050	0.130	4.62	0.0049	0.28
1050 +	2.556	90.77	0.0963	5.59
TOTALS	2.816	100	0.1061	6.15

- DATA NOT TAKEN

STATION	DATE	TIME	LATITUDE	LONGITUDE	SONIC DEPTH
40	6 JUL 78	12:40:00	40 28.2 N	71 57.2 W	62.0
	SURFACE TEMPERATURE	NET MOUTH AREA	FLOW METER FACTOR	NET MESH	
	15.17	0.2827	0.1570	223	
NET TOW DEPTH	FLOW METER	VOLUME SAMPLE	FRACTION COUNT	VOLUME COUNT	
60.0	560.	24.85	0.029	0.710	

S P E C I E S	RANK COUNTS %			NO./M3	NO./M2
PSEUDOCALANUS SPP. C	1.0	420	28.67	591.43	35486.
PSEUDOCALANUS MINUTUS AF	2.0	245	16.72	345.00	20700.
OITHONA SIMILIS	3.0	228	15.56	321.06	19264.
CALANUS SPP. C	4.0	160	10.92	225.31	13518.
CHAETOGNATH	5.0	81	5.53	114.06	6844.
CENTROPAGES SPP. C	6.0	74	5.05	104.20	6252.
PARACALANUS SPP. C	7.0	56	3.82	78.86	4731.
CALANUS FINMARCHICUS A	8.0	46	3.14	64.78	3887.
PARACALANUS PARVUS AF	9.0	39	2.66	54.92	3295.
PSEUDOCALANUS MINUTUS AM	10.0	36	2.46	50.69	3042.
CENTROPAGES TYPICUS AM	11.0	29	1.98	40.84	2450.
CENTROPAGES TYPICUS AF	12.0	28	1.91	39.43	2366.
ACARTIA SPP. C	13.0	11	0.75	15.49	929.
TEMORA SPP. C	15.0	4	0.27	5.63	338.
PARACALANUS PARVUS AM	15.0	4	0.27	5.63	338.
ACARTIA LONGIREMIS AF	15.0	4	0.27	5.63	338.
TOTALS	16	1465	100	2062.97	123778.

SIZE FRACTIONS (MICRONS)	GRAMS DRY WEIGHT %		GM/M3	GM/M2
223-505	0.082	2.46	0.0033	0.20
505-1050	0.079	2.37	0.0032	0.19
1050 +	3.171	95.17	0.1276	7.65
TOTALS	3.332	100	0.1341	8.04

- DATA NOT TAKEN

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